SOCIAL RELATIONSHIPS AND PSYCHOLOGICAL WELL-BEING: HOW INTERPERSONAL RELATIONSHIPS IMPACT OVERALL MENTAL HEALTH AND PSYCHOLOGICAL WELL-BEING OF COLLEGE STUDENTS

by

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Social Relationships and Psychological Well-Being: How Interpersonal Relationships Impact Overall Mental Health and Psychological Well-Being of College Students

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DEDICATION

This is dedicated to my loving husband Spencer, my wonderful parents Ken and Teresa, my family, and my dog Pepper.

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LIST OF ABBREVIATIONS

Survey of Student Engagement	NSSE
Living Learning Community	LLC
Analysis of Variance	
Leadership and Service LLC	
Mindfulness LLC	
Non-LLC Residence Hall Community	RH
Tukey's Honest Significant Difference	Tukey's HSD
Reverse Scored	rs

ABSTRACT

SOCIAL RELATIONSHIPS AND PSYCHOLOGICAL WELL-BEING: HOW

INTERPERSONAL RELATIONSHIPS IMPACT OVERALL MENTAL HEALTH

AND PSYCHOLOGICAL WELL-BEING OF COLLEGE STUDENTS

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Declining mental health is a growing epidemic on college campuses today. Research

confirming this claim provides strong reason for psychologists, student affairs

practitioners, and higher education administrators to address this problem by finding

means of improving psychological health among college students. Previous research has

found that social relationships are a significant predictor of psychological health and

well-being. Using Ryff's Scales of Psychological Well-being, the aim of this research is

to empirically demonstrate the correlations between peer relationships and psychological

well-being among college students living in three different residence hall communities at

a large public research university.

Keywords: psychological well-being, mental health, college students, student

affairs.

CHAPTER ONE

Background

Well-being among college students is becoming an increasingly prominent topic in higher education. Bringing Theory to Practice, a project founded in 2003 by Donald W. Harward & Sally Engelhard Pingree, brought the idea of cultivating the well-being of the whole student in higher education to the forefront of the higher education conversation ("About Bringing Theory to Practice", n.d.). The project has funded over 300 institutions that are committed to advancing this idea. In their book, *Contemplative Practices in Higher Education*, Barbezat and Bush (2013) discuss ways that teachers and administrators can help students "find more themselves in their courses" (p. 9). Other scholars, including Bloom, Hutson, He, and Konkle (2013) suggest that, beyond promoting scholarship and academic success, "...higher education is positioned to help students become their best selves and achieve their dreams, goals, and potentials" (p. 5).

Psychological well-being is a topic of particular interest because of the extended impacts it has on other areas of well-being, including physical, emotional, and cognitive factors (Canevello & Crocker, 2011; Huppert, 2009; Reis, 2012). According to Huppert (2009), psychological well-being involves effective functioning, or "the development of one's potential, having some control over one's life, having a sense of purpose, and experiencing positive relationships" (p. 138). Additionally, psychological well-being is directly related to mental health in that it is a dimension of mental health.

College students face a growing number of stressors during college. These stressors, such as homesickness, academic difficulties, financial pressures, and conflict in relationships, can lead students to feel alone, isolated, and out of control of their lives and can be precursors of mental health issues (Macalester College; National Institute of Mental Health, 2012). The identification of mental health issues has been continuously on the rise on college campuses (National Alliance on Mental Illness, 2012). In the National Survey of College Counseling Centers 2014 report, 94 percent of the 275 college counseling center directors surveyed reported a steady increase in the number of students with more serious mental and psychological health problems over the last five years (Gallagher, 2014). The more serious mental issues described in the report included clinical depression, anxiety disorders, self-injury, eating disorders, and medication issues, as well as others. Moreover, 86 percent of the directors surveyed indicated that the number of students entering college who have already been prescribed psychiatric medications continues to rise. According to the American College Health Association (2012), over 25 percent of college students are diagnosed and/or receive treatment for mental illness.

These mental health issues impact the daily lives of students. According to an American College Health Association (2012) survey, over 30 percent of college students reported having difficulty functioning because of debilitating depressive symptoms. Even more students, about 50 percent, experienced overwhelming anxiety. Students reported that feelings of depression and anxiety make it exceedingly difficult for them to thrive academically. Not only are these mental health issues impacting students' lives at

August 2011 and November 2011, the National Alliance on Mental Illness (2012) conducted a survey of college students who had been diagnosed with a mental illness and who were either currently enrolled or recently enrolled in college within the previous five years to ask about their experiences living with a mental illness while attending college. Sixty-four percent of the 765 survey respondents answered "yes" to the question "Are you no longer in college because of a mental health related reason?" (p. 8).

Problem Statement

Research on poor mental health among college students demonstrates the effect of low levels of psychological well-being on academic and college success (Kessler, Foster, Saunders, & Stang, 1995). What factors or environments can help decrease mental health issues and increase psychological well-being among college students? Students who dropped out of college due to mental health problems stated that more support, specifically emotional support, from family and friends would have made a difference (National Alliance on Mental Illness, 2012). This statement is consistent with previous research on the topic, which states that engaging in more supportive social relationships in general promotes better psychological health (Reis, 2012). As cited in Segrin and Taylor (2007), "positive relations with others are a fundamental element of well-being" (p. 644).

Although the impact of relationships and social interactions on psychological well-being has been studied, there is relatively little research available that discusses psychological well-being and related factors among college students (Bowman, 2012). However, research that has been conducted on the college student population does find

that happiness among college students and social interactions are related factors. Diener and Seligman (2002) conducted a study of 222 college students at the University of Illinois to measure students' level of happiness as it relates to factors including life satisfaction and relationships. The researchers found that college students who were considered very happy had more satisfying interpersonal lives and spent more time socializing than those who were considered very unhappy.

Purpose of the Research

The purpose of this thesis paper was to address the growing mental health epidemic on college campuses caused by low levels of psychological well-being among college students. Specifically, this study aimed to examine the impact social interactions among college peers can have on psychological health. Through this research, the following questions were addressed:

- 1) How does the frequency of social interactions impact the psychological wellbeing of college students?
- 2) Does the type of community that a student is affiliated with influence their psychological well-being?
- 3) Is an individual's identified sex related to psychological well-being?
- 4) How do these factors correlate with academic success?

The intent of this study was to examine empirical evidence about the relationship between social interactions and psychological well-being and to what degree that contributes to greater academic achievement and retention among college students.

Additionally, this study will contribute to research conducted in the field of well-being within higher education.

Definition of Terms

<u>Academic performance/student success</u>: Students' performance in the classroom, as measured by Grade Point Average.

<u>Eudaimonic well-being</u>: Focusing on certain facets of the human experience, particularly relationships and achievements (MacLeod, 2014, p. 1074) and the realization of one's potential (Ryff, Singer, and Love, 2004),

<u>Health</u>: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" ("Mental Health", 2014, para. 2)

Mental health: "A state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" ("Mental Health", 2014, para. 1)

Mental health problems/illness: "A condition that impacts a person's thinking, feeling or mood [which] may affect his or her ability to relate to others and function on a daily basis" ("Mental Health Conditions", n.d., para. 1).

<u>Potential</u>: "Qualities that exist and can be developed" ("Potential, n.d.).

<u>Psychological well-being</u>: Effective functioning. "The development of one's potential, having some control over one's life, having a sense of purpose, and experiencing positive relationships" (Huppert, 2009, p. 138).

<u>Social interactions</u>: "Reciprocal stimulation or response" with one or more person(s) through conversation or activity ("What is Social Interaction", n.d., para. 1).

Weak ties: "Relationships involving less frequent contact, low emotional intensity, and limited intimacy" (i.e. acquaintances) (Sandstrom & Dunn, 2014, p. 910).

Significance of the Research

This research is significant to the field of higher education because of the prevalence of low psychological health among college students and its impact on academic performance and retention. As demonstrated by the National Alliance on Mental Health (2012), which received 765 responses from students with diagnosed mental illnesses, a majority of the respondents left college because of a mental health issue. Because of the significant influence psychological well-being has not only on mental health, but also on all other areas of well-being, including physical, emotional, and cognitive factors, it is imperative that the issue is addressed within higher education settings (Canevello & Crocker, 2011; Huppert, 2009; Reis, 2012). Although many factors contribute to psychological well-being, knowledge about the impact of social relationships can serve as a stepping-stone in alleviating the mental health problem on college campuses. The research can inform student affairs practitioners and other higher education personnel about their role in promoting positive social interactions and relationships through programs and events that can potentially influence students' wellbeing.

CHAPTER TWO

Introduction

The literature review is drawn from several fields of study, including psychology, sociology, public health, higher education, and interpersonal communication studies. A growing body of research indicates that psychological well-being impacts many facets of overall functioning (Canevello & Crocker, 2011; Huppert, 2009; Reis, 2012). Research also reveals a positive correlation between social relationships and psychological well-being, functioning, and health (Cable, Bartley, Chandola, & Sacker, 2012; Reis, 2012; Bowman, 2010; Segrin & Taylor, 2007; Umberson, Chen, House, Hopkins, & Slaten, 1996; Fitzpatrick, Newman, Lamb, & Shipley, 1988). However, research on these particular topics as they relate to college students lacks breadth and depth (Bowman, 2012). This thesis, with its focus on a college student population, contributed to lessening the gap in the types of populations studied.

Theories in Research

Throughout the research on psychological well-being and social relationships, several theories were addressed. These theories included the Social Exchange Theory (Rook, 1984), the Positivity ratio (Fredrickson & Losada, 2005), the Michelangelo Phenomenon (Drigotas, Whitton, Rusbult, & Wieselquist, 1999), Peterson and Seligman's Strengths of Character (Peterson, Seligman, 2004), and Ryff's Six Dimensions of Psychological Well-Being (Ryff, 1989).

The Social Exchange Theory is a theory often used by sociologists and social psychologists, as well as communication studies scholars, to study relationship dynamics (as cited in Rook, 1984). Social Exchange Theory is based on the principle that people enter into relationships in which the benefits they receive from the relationship outweigh the costs of the relationship. Interdependence Theory, a subset of the Social Exchange Theory, is rooted in the idea that closeness is the key to all relationships (Patrick, Knee, Canevello, & Lonsbary, 2007). It states that all relationships have rewards and costs and individuals try to maximize rewards and minimize costs. Thus, individuals in relationships in which the rewards outweigh the costs are more likely to remain in the relationship, while individuals in relationships in which the costs outweigh the rewards are more likely to abandon the relationship. Fredrickson and Losada (2005) present a similar concept as it relates to positivity and negativity. In their study of 188 first- and second-year students at a large Midwestern university, Fredrickson and Losada tracked the positive and negative emotions each student reported over 28 days to discover the necessary ratio of positive to negative experiences for flourishing mental health. They found that the critical ratio of positive to negative experiences is 3:1. Fredrickson and Losada claimed that individuals flourish when they have at least 3 positive experiences, including interactions with others, for every 1 negative experience they encounter. However, in their review of the positivity ratio, Brown, Sokal, and Friedman (2013) critiqued the study asserting that the mathematical equations used to determine the ratio were incorrectly applied and encouraged caution when considering the positivity ratio. These theories suggest the idea that rewarding and positive relationships and interactions increase an individual's well-being, while negative relationships and interactions in which costs outweigh benefits decrease areas of well-being. This concept may be evident in college populations.

The Michelangelo Phenomenon is based on the idea that close partners "sculpt" one another to reveal each individual's ideal self (Drigotas, Whitton, Rusbult, & Wieselquist, 1999). That is, the "self" is shaped by the behaviors and perceptions of those with whom they have close partner relationships. Drigotas, Whitton, Rusbult, and Wieselquist (1999) suggested that the formation of the "ideal self" is associated with vitality and adjustment in ongoing close relationships, as well as personal well-being.

A model related to research on well-being and psychological health is Peterson and Seligman's Strengths of Character (Peterson & Seligman, 2004). Their work focuses on mental health as it relates to character strengths and virtues, rather than mental health in terms of solely the absence of disease and illness. Specifically, their model emphasizes positive individual traits and the impact these traits have on individuals' psychological functioning. Park, Peterson, and Seligman (2004) define character strengths "as positive traits reflected in thoughts, feelings, and behaviors" (p. 203). Peterson and Seligman's model breaks down Strengths of Character into six areas: Wisdom and Knowledge, Courage, Humanity, Justice, Temperance, and Transcendence. Each area is further broken down into strengths related to the umbrella classification of each area. Three of the six areas, Humanity, Justice, and Temperance, have a focus on others, demonstrating the significance of relationships on psychological functioning (Peterson, Seligman, 2004).

Ryff's Six Dimensions of Psychological Well-Being, developed by Dr. Carol Ryff, professor in the Department of Psychology at the University of Wisconsin – Madison, explains psychological well-being using the following dimensions: autonomous functioning and decision-making, environmental mastery, personal growth, positive relationships, sense of purpose, and self-efficacy (Ryff, 1989b). All six dimensions impact one another. Among the six dimensions, Ryff and Singer (2000) described positive relations with others as a fundamental element of flourishing, a key factor of development used to measure well-being. The researchers explained, "Across time and settings, people everywhere have subscribed to the view that close, meaningful ties to others is an essential feature of what it means to be fully human" (p. 31). Ryff (1989b) also described self-actualizers, or those who experience flourishing, as "being capable of greater love". She tied this to Erik Erikson's developmental stage theory (as cited in Ryff, 1989, p. 1071), which suggests that creating and maintaining close relationships with others, or obtaining intimacy, is a pinnacle achievement in young adulthood and overall development. Throughout Ryff's research, the dimension of positive relations with others has consistently been a central component of subjective well-being and health (Ryff, 1989a; Ryff, 1989b; Ryff & Singer, 2000; Ryff, Singer, & Love, 2004). Below are the characteristics of each dimension discussed by Ryff (1989b).

Self-acceptance. According to Ryff (1989b), self-acceptance is "the most recurrent criterion of well-being" (p. 1071). It is having a positive attitude about oneself and his or her past, as well as accepting all parts of the self, including faults and imperfections.

Mental health and positive psychological functioning have been directly tied to self-

acceptance.

Positive relations with others. This dimension was the central focus of this study. Those who experience positive relations have "warm, satisfying, and trusting relationships" and are able to display greater affection and empathy for others (Ryff, 1989b, p. 1072). Positive relations with others have been found to positively impact psychological well-being. Reis (2012) reported that positive relations and social support are the most common sources of happiness among people. "The ability to love is viewed as a central component of mental health" (Ryff, 1989b, p. 1071).

Autonomy. This dimension is characterized by independence of thought and action and self-determination (Ryff, 1989b). Autonomous individuals do not rely on the approval of others to determine how to think and act. They evaluate themselves based on their individual beliefs and standards and do not give in to social pressures. Autonomous individuals feel they have a high locus of control. That is, they feel that they have control over life events and circumstances.

Environmental mastery. This dimension focuses on an individual's sense of competency and mastery of their environment, as well as advancement. It entails being able to "choose or create environments suitable to his or her psychic conditions" (Ryff, 1989b, p. 1071). This is an important element of mental health. Individuals who demonstrate environmental mastery are able to find and take advantage of opportunities within their various environments.

Purpose in life. This dimension is characterized by feelings of directedness and meaning in life (Ryff, 1989b). Individuals who possess these qualities are intentional about

discovering and fulfilling what they believe is their purpose in life. They set goals and deliberately move in the direction of those goals. People who feel that life is purposeful and has meaning have higher levels of mental health.

Personal growth. Ryff (1989b) described this dimension as continuing to "develop one's potential" (p. 1071). In order for individuals to continue to grow into their potential, they must be open to new experiences and be willing to challenge themselves emotionally, cognitively, and physically to realize their capabilities and potentialities. A key feature of the personal growth dimension is the belief that growth and development is continuous.

Researchers have also critiqued Ryff's theory. In their 2006 paper, Springer and Hauser discussed their study to measure the construct validity of Ryff's model. They critiqued the model, stating that Ryff's Scales of Psychological Well-Being instrument "does not measure as many as six distinct dimensions of psychological well-being" (p.1100). The researchers attributed this to the significant intercorrelations between all of the dimensions. The correlations between each dimension are significant at the p > .001 level. If the correlations are too high, the problem arises that the dimensions are not empirically different from one another and, therefore, cannot be measured as six distinct dimensions. Springer and Hauser claimed that the factor correlations found in their research refute the multidimensionality of Ryff's model. Others have also found this overlap in dimensions. van Dierendonck, Díaz, Rodríguez-Carvajal, Blanco, and Moreno-Jiménez (2008), found that four out of the six dimensions overlapped in content. Many of the statements within the scale addressed similar factors, although they were

being used to measure separate dimensions. They suggested that this could be remedied by removing the measures with too much content overlap, thereby empirically confirming Ryff's model.

In her 1989 study, Ryff analyzed the intercorrelations of each psychological well-being dimension and found significant correlations between each dimension, ranging from .32 to .76, as shown in Table 1. Several of the correlations are very strong, which evoked the possibility that the scales were too similar and potentially measured the same construct (p. 1074). Thus, Ryff acknowledged the potential issue of content overlap and explained that as the correlations between each factor become greater, the concept of six dimensions is challenged. However, Ryff demonstrated that the scales are empirically different because of the composition of the scales, the process by which they were constructed, and the different patterns that exist between the intercorrelations. Ryff provided the following example in her study: "purpose in life is highly related to self-acceptance, but has generally lower correlations with life satisfaction, affect balance, and self-esteem than occur between these measures and self-acceptance" (p. 1074).

Table 1

Intercorrelations of Well-Being Measures (adapted from Ryff, 1989, p. 1073)

	1	2	3	4	5	6
1. Self Acceptance						
2. Positive Relations	0.52					
3. Autonomy	0.52	0.32				
4. Environmental Mastery	0.76	0.45	0.53			
5. Purpose in Life	0.72	0.55	0.46	0.66		
6. Personal Growth	0.48	0.57	0.39	0.46	0.72	

Note: All correlations are significant at the p > .001 level.

Themes in Research

Similar themes were discussed throughout the literature on social relationships and psychological well-being. Below are several common themes found in the research that informs this study. The information provides support for the psychological and health benefits of positive social relationships and interactions.

Social Support and Positive Relations

The social support and positive relations found in healthy relationships consistently show that relationships are the most potent predictor of psychological health and flourishing (Reis, 2012). Fredrickson (2009) went so far as to state that "flourishing is not a solo endeavor" and "nobody reaches his or her full potential in isolation" (p. 191). In essence, social relationships are vital for flourishing. Reis (2012) found that the presence of social support and positive relations were the most frequent source of happiness among human beings because of their social nature, while the absence of social support and positive relations were related to psychological distress. Umberson, Chen, House, Hopkins, and Slaten (1996) discovered similar findings demonstrating that

supportive relationships are associated with lower levels of psychological distress. Burns and Machin (2013) found that social relationships were a better indicator of psychological well-being than life-events. Evidence shows that perceived partner responsiveness is correlated with psychological health, emotional well-being, and life satisfaction, as well as achievement motivation (Reis, 2012). Elliot and Reis (2003), found from their study of 192 university undergraduate students that students who perceive higher levels of support tend to be more motivated to achieve goals, demonstrated lower fear of failure, and adopted more approach-oriented personal and mastery goals than students who perceived low levels of support from others (p. 321). Students who felt supported and who had secure attachments to others were more driven to perform well and experienced more "unimpeded, appetitive exploration in achievement settings" (p. 328).

In their study of relationships among 344 "cognitively intact" residents aged 60 years and older at assisted living facilities in Florida, Street and Burge (2012) discovered that positive relationships helped the assisted living residents adapt more easily to various new environments. It can be surmised from this research that similar results could occur among young adults adjusting to college environments, such as residence halls, academic classes, and the overall diversity of students (Schudde, 2011; Tinto, 1993). Another finding by Hui, Molden, and Finkel (2013) suggested that the support of autonomy between romantic partners in close relationships was important for the well-being of individuals in the relationship because of the necessity for people to maintain self-direction towards personal goals. Additionally, the support and responsiveness from a

partner can help in the creation of the ideal self, or the kind of person someone has the potential of becoming, as partners sculpt one another by reaffirming certain thoughts and behaviors (Drigotas, Rusbult & Wieselquist, & Whitton, 1999).

Commitment within a relationship can determine the importance of forgiveness, which, in turn, has been found to be related to psychological well-being (Karremans, Van Lange, Kluwer, & Ouwerkerk, 2003). Karremans, Van Lange, Kluwer, and Ouwerkerk (2003) found that forgiveness (or lack thereof) in a relationship impacts the psychological well-being of partners with a strong commitment to one another more than partners who are less committed to one another. Psychological tensions caused by failure to forgive a partner is associated with reduced levels of self-esteem and life satisfaction. Individuals in high commitment relationships require exchanges of forgiveness in the relationship in order to generate positive affects on well-being.

Another finding by Rook (1984) demonstrated that the negative impacts of negative social interactions on well-being often outweigh the positive impacts of positive social interactions. In other words, negative social interaction are more potent and decrease psychological well-being more than positive interactions increase psychological well-being. In her study, Rook interviewed 120 widowed women ages 60 to 89 from four senior citizen centers in Los Angeles and found that social problems were significantly correlated with lower well-being and life satisfaction among the women, whereas the number of supportive others was not found to be correlated with well-being (p. 1102). Although the latter finding is not consistent with other research, in that supportive relationships did not contribute to greater well-being, Rook explained that this can likely

be attributed to the affective differences between the items used to assess problematic social ties (more affect-laden) and supportive social ties (less affect-laden) (p. 1103). These findings provide strong support the premise that relationships greatly impact the psychological well-being of individuals.

Sex Differences

Kendler, Myers, and Prescott (2005) conducted a longitudinal study in which they interviewed 1,057 opposite-sex dizygotic adult twin pairs in an effort to discover sex differences in social support and major depression. The researchers discovered that "female twins reported significantly higher levels of global social support than did their twin brothers" (p < 0.0001) (p. 251). Females reported significantly higher levels (p < 0.0001) of social support in four of the seven social support factors studied: 1) support from other relatives, 2) support from friends, 3) support from children, and 4) social integration. Men, on the other hand, reported higher levels of social support from their spouses and their co-twins. Although women reported higher levels of social support in more of the factors studied, the researchers found that women were affected more by social support, or lack thereof, than men. Women experienced more depressive symptoms than men when they perceived low levels of social support. However, the researchers did not find sex differences in the risk for major depression.

Evidence also suggests that men and women gain different things from relationships (Cable, Bartley, Chandola, & Sacker, 2012; Umberson, Chen, House, Hopkins, Slaten, 1996). For instance, in a study using the data from a 1986 survey, "Americans' Changing Lives", which surveyed 1,358 men and 2,259 women ages 24 years and older, Umberson et. al (1996) found that men gain more from practical and

tangible aspects of relationships such as assistance fixing an object, whereas women gain more from the intimate and interactive aspects (e.g. discussion, advice giving and receiving).

Cable, Bartley, Chandola, & Sacker (2012) discovered in their study of 3,169 men and 3,512 women that the type of relationship, kinship – relationships with relatives – or friendship, held different significance for men versus women. They found that kinship networks only had significant relationships with men's psychological well-being, whereas friendship networks had significant relationships with both men's and women's psychological well-being, but especially for women (p. 170). The researchers found that men with no friends had psychological well-being levels 2.6 points lower than men with friends, and women with no friends had psychological well-being levels nearly 4 points lower than women with 10 or more friends. Overall, the impact of the size of the kinship or friendship networks on psychological well-being was not significantly different between men and women. In general, although men and women may receive similar psychological benefits from relationships, the content of their relationships may be different, leading researchers to believe that they receive different experiences altogether (Umberson et. al, 1996).

Importance of Others

In a study of 171 lay people, middle-aged (M = 52.5 years, SD = 8.7) and older (M = 73.5 years, SD = 6.1), Ryff (1989a) recorded the most prominent theme in spontaneous definitions of psychological well-being among the sample to be an "others orientation". Individuals who think of others often and provide help, service, support, and care to others are likely to have higher levels of psychological well-being. After

coding and analyzing the open-ended answers of the population sample, Ryff found that approximately 50% of the middle-aged respondents and nearly 60% of the older respondents provided an "others oriented" response to the question "What does it mean to be well-adjusted?" (p. 202). This finding demonstrates that people middle-aged and older recognized the significant impact relationships with others have on their well-being and feelings of being well-adjusted in life. To support these lay people's definitions, perceived partner responsiveness and active engagement in close relationships, as well as giving through acts of kindness have been linked to higher levels of psychological well-being (Canevello & Crocker, 2011; Park & Biswas-Diener, 2013). Canevello and Crocker (2011) found in their study of 65 college roommate pairs at U.S. institutions that students who focus on supporting their roommates by showing compassion and being emotionally present create positive responsiveness dynamics that lead their roommates to value them more. When students perceive that their roommates value them more, they experience positive impacts on their psychological well-being.

When individuals perceive being valued by others and feel valued, they experience positive increases in psychological well-being (Canevello & Crocker, 2011). In addition, reciprocity in relationships is an important indicator of the psychological benefits gained from social relationships (Young, Young, & Hyunmi, 2013). For instance, partners must perceive that they are receiving the same amount of support from the other as they provide. Young, Young, and Hyunmi (2013) also found that individuals who expressed a higher dependence on parasocial or one-sided relationships tended to experience higher levels of loneliness and distrust. This finding demonstrates the

significance reciprocal positive behaviors in relationships can have on psychological well-being.

Sandstrom and Dunn (2014) suggested that weak ties with others can also significantly influence well-being. In their study of 242 undergraduate students (82 males, 160 females; M age = 19.07, SD = 1.78), they found that students who interacted more with weak tie relationships, such as classmates, on a daily basis were happier than others who did not experience weak-tie interactions regularly, t(240) = 3.30, p = .001, and felt a greater sense of belonging, t(240) = 3.95, p < .001 (p. 912). When students experienced more weak tie interactions than usual, they reported feeling happier (Sandstrom & Dunn, 2014, p. 917). Students who at least reported having ongoing weak tie relationships tended to be happier than those who had no relationships. This finding suggests that students who reported having ongoing weak tie relationships tend to be happier than those who have no relationships. Sandstrom and Dunn (2014) also looked at weak-ties and well-being at a community level and reported consistent results. These results were also consistent between introverts and extraverts.

Psychological Well-being and Health Gains

The increases in psychological well-being from experiencing positive relationships has been found to be crucial for physical and physiological health processes (Ryff and Singer, 2000). High levels of psychological well-being have been found to promote physical health (i.e. cardiovascular and neurological), while lower levels are correlated with decreased physical health (Ryff, Singer, & Love, 2004). For instance, in their study of 135 women ages 61 years and older, Ryff, Singer, and Love (2004) found through bivariate correlation tests that higher eudaimonic, or the realization of personal

potential, well-being, as measured by Ryff's six dimensions of psychological well-being dimensions, was associated with lower cardiovascular risk. Specifically, when the researchers tested HDL cholesterol levels, a chemical in the body considered good for cardiovascular health, they found significant relationships with personal growth, r (133) = .17, p < .05, and purpose in life, r (133) = .22, p < .01.

According to Ryff, Singer, and Love (2004), "the experience of well-being contributes to the effective functioning of multiple biological systems, which may help keep the organism from succumbing to disease, or, when illness or adversity occurs, may help promote rapid recovery" (p. 1383). Ryff, Singer, and Love (2004) also found that individuals who were intentional and purposeful in their engagement in life tended to start the day with and maintain lower cortisol levels, the hormone associated with stress. They also found that women who experienced higher levels of environmental mastery, being capable of handling everyday events, showed longer, deeper, and more satisfying periods of sleep and recovery.

Boehm and Kubzansky's research (2012) found that psychological well-being was positively associated with cardiovascular health. Higher levels of psychological well-being were also found to be associated with increased overall biological functioning. Additionally, greater psychological well-being was related to better behaviors and decisions associated with healthy living (Bogg & Roberts, 2004). Studies have also found that socially isolated individuals experience higher mortality rates, as predicted by decreased heart rate variability (Hortsen et al., 1999).

Student Engagement & Sense of Belonging

The relationships formed through students' engagement in academic and cocurricular programs and activities are generally associated with gains in areas from academic performance to ethics of caring (Brown & Brudsal, 2012; Astin, Astin, & Lindholm, 2010). Brown and Burdsal (2012) found that the relationships students have with other classmates, instructors, and administrators are correlated with grade point average and overall academic performance (p. 446). Using items from the National Survey of Student Engagement (NSSE) instrument, Brown and Burdsal collected survey responses from 3,839 undergraduate first-year and senior students at Wichita State University. They divided the NSSE items used into four factor categories to define sense of community: campus social milieu, social interaction with friends and people of diverse backgrounds on campus encouraged by the institution in an effort to assist academic growth; divergent thinking, interactions with others that promote critical thinking and examining ideas and problems from different perspectives; institutional involvement, engagement in activities that further academic growth, such as group studying, internships, and campus committees and organizations; and emotional affiliation with the institution through the interactions and relationships with classmates, faculty, staff, and administrators.

These four factors were compared to academic success (GPA) and degree completion. Through their analysis of the survey responses, the researchers discovered that institutional involvement was positively related to degree completion (r = 0.213, p < .01). They also found a connection between relationships with classmates, instructors,

and administrators and related to academic success (r = 0.103, p < .01). This evidence suggests that "universities that encourage the development of high-quality relationships between instructors and students and administrators and students, in addition to supporting relationship development among students themselves, may see improvements in their graduation rates" (p. 445). Positive relations have been associated with increases in grade point average among students, while students' negative relations with others were correlated with decreases in academic performance (Brown & Brudsal, 2012; Flynn, 2014; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008). Gains in academic performance not only influence retention and degree completion, but also influence psychological well-being.

Astin, Astin, and Lindholm (2010) conducted a longitudinal study of 112,232 first-year students at 236 baccalaureate-granting institutions to assess spirituality and religiousness among students entering their first year or undergraduate study. In their 2007 study, the researchers received 14,527 responses from 136 of the institutions and found that the experiences students had through involvement in curricular and co-curricular activities helped students cultivate their ethic of caring, which is tied to the "others orientation", an element that has significant ties to psychological well-being. Rather than focusing on relationships, Astin, Astin, and Lindholm (2010) emphasized spirituality, or "inner, subjective life" and "affective experiences", as a central factor to overall psychological growth (p. 4).

In addition, student engagement in the classroom and in on-campus activities encourages a greater connection to the institution, leading to greater commitment and higher likelihood of college completion (Brown & Brudsal, 2012). Student engagement can help students feel a sense of belonging to a community, whether that is an organization, team, or the institution as a whole (O'Keeffe, 2013). However, feeling a sense of belonging and connection may not necessarily be tied to a group. As cited by O'Keeffe (2013), "a sense of connection can emerge if the student has a relationship with just one key person" (p. 607). One positive relationship can be all it takes to help a student feel like they belong, which can contribute to students' retention.

Although these studies found links between involvement and college success and psychological well-being, the degree of social connections and depth of involvement necessary to positively influence psychological well-being was not reported. For example, they did not differentiate between the quantity of friends and quality of relationships.

Residence Hall Communities and Social Support

Research has found that students who live on-campus in residence hall communities are provided with more opportunities for social support and growth than students who live off campus (Schudde, 2011). This arguably puts students who live on-campus at an advantage for academic and collegiate success because of the number and variety of resources readily available to them. Students who live in residence halls are also likely to experience more social support because they live in a community of peers who are experiencing the same stressors. Tinto (1993) explained that residence hall communities help to prevent feelings of isolation that new students often experience.

Schudde (2011) found through regression analysis in a study of 2,249 first-year residential students and 1,159 first-year nonresidential students that residential students were 3.3 percent more likely to persist into their second year, while mean scores suggested a 4.2 percent increase in retention for on-campus residence over off-campus residents, showing a relationship between on-campus living and retention (p < .01).

Living Learning Communities (LLCs) were created to enhance the experience students have in residence halls by connecting academic and non-academic elements of college in an effort to augment the overall college experience and promote retention (Spanierman, Soble, Mayfield, Neville, Aber, Khuri, & De La Rosa, 2013; Inkelas, Daver, Vogt, & Leonard, 2007). Spanierman et al. (2013) conducted a study of 344 undergraduate students living on campus at a large public university to discover if students who reside in living learning communities have a greater sense of community and belonging than those students who live on campus but are not part of an LLC. Forty-eight percent (48%) of the population studied participated in a living learning community. The researchers found that students participating in LLCs reported a greater sense of community (M = 3.29; SD = 1.01) than students not participating in an LLC (M = 2.80; SD = 1.02), demonstrating a relationship between sense of community and participation in living learning communities (F(1,160) = 9.32, p < .01).

Limitations in Reviewed Literature

It is important to note limitations that exist in the reviewed literature. A common limitation was the reliance on individual self-report data. It is likely that biases and inaccuracies were presented because of the inherent subjectivity of self-reports (Segrin &

Rynes, 2009; Patrick, Knee, Canevello, & Lonsbary, 2007). To compensate for this limitation, some authors suggested surveying close partners to assess the other partner's behaviors and tendencies within the relationships and compare the different assessments (Segrin & Rynes, 2009). Most studies of relationships and psychological well-being focused on middle-aged and elderly adults. Research is lacking in this area among children and young adults, specifically college-aged students. Previous research also does not take into consideration the extra element of engagement in on-campus opportunities, which was a secondary variable in this study.

Finally, many of these studies used correlational analyses, making it difficult to determine causality. For instance, a study conducted by Cable, Bartley, Chandola, and Sacker (2012) was one of few studies that controlled for previous psychological health in an effort to discover a directional relationship between psychological health and social relationships. Previous psychological health is a confounding variable that could impact the participants' selection of persons with whom they have interpersonal relationships. It can also affect participants' desire to seek out and participate in social relationships altogether. If variables are not controlled, a question remains of which variable actually has an impact on the other. It is possible that the relationship is bidirectional and a pure causal relationship does not exist.

CHAPTER THREE

Methodological Approach

This quantitative study used surveys of self-reported data to measure correlations found between social relationships and psychological well-being among college students living in various communities in residence halls. The questions this study aimed to address were as follows:

- 1) How does the frequency of social interactions impact the psychological wellbeing of college students?
- 2) Does the type of community that a student is affiliated with influence their psychological well-being?
- 3) Is an individual's identified sex related to psychological well-being?
- 4) How do these factors correlate with academic success?

As this was a descriptive quantitative study, only associations between variables can be established and causality cannot be determined.

Theoretical Framework

The theoretical framework used for this study was Ryff's Six Dimensions of Psychological Well-Being (Ryff, 1989). Ryff's theory integrates previous research on mental health, clinical, and life span development theories to create a framework that highlights key elements of psychological functioning (p. 1071). This model identifies six dimensions that contribute to psychological well-being: self-acceptance, positive

relations with others, autonomy, environmental mastery, purpose in life, and personal growth.

Population Sample

The population sample chosen for this study consisted of college students at a large public research university, specifically, students living in on-campus residence halls. Three groups of students were selected for the purposes of this study: residents of a leadership and service Living Learning Community (LLC), residents of a mindfulness LLC, and residents not participating in an LLC as the control group.

LLCs provide a unique experience for students with similar interests in residence halls while engaging their learning through programs and courses that focus on the mission of the LLC. Below are descriptions of the two LLCs included in this research: **Leadership and service LLC.** The leadership and service based LLC provides students the opportunity to live with peers who share their interest in social issues and concerns, including homelessness and environmental conservation. Their goal is to help find solutions to our societies' social issues. Residents of this LLC also participate in academic courses that focus on local and global issue, leadership, and citizenship. The LLC promotes community building among its residents through retreats held each semester, group work in the classroom, group service projects, and weekly social events. **Mindfulness LLC.** The mindfulness LLC strives to take a more holistic approach to educating residents by meshing together academic study with opportunities for selfdiscovery. Residents explore the academic field of positive psychology and utilize the knowledge they gain to help them have a more mindful, self-aware, and purpose-driven college experience. The community also recognizes stress as a challenge for college

students and aims to help students manage their stress through various techniques. To build community, the residents in this LLC attend a fall overnight retreat, in addition to participating in weekly mindfulness exercises as a group and monthly programs which include service projects and field trips.

These LLCs were chosen based on their differing missions, which both have a focus on people. The leadership and service LLC emphasizes helping and serving others. This fits with the "others orientation" which has been associated with higher levels of psychological well-being (Canevello & Crocker, 2011). Rather than focusing specifically on others, the mindfulness LLC has a stronger focus on the self, as students learn to understand themselves on their journey to becoming a whole person, which is also associated with greater psychological well-being. This study examined whether relationships, with their focus on others, or mindfulness have stronger associations with psychological well-being. The two LLCs were compared to non-LLC campus residents to determine if there was a difference in the level of psychological well-being between those who were involved in an LLC and those who were not.

Methods

Variables

The independent variable for this study is social relationships and interactions as defined and measured by the demographic factor of daily interactions. Psychological well-being, measured by Ryff's dimensions of psychological well-being is the dependent variable.

Participants

Participants consisted of 68 students living in the leadership and service LLC (n = 23), the mindfulness LLC (n = 13), and a standard residence hall community (n = 29) at a

large public institution. Although 68 students participated in the study, only 65 respondents completed the survey. Three surveys were withdrawn from the sample because those participants completed less than half of the survey. The age range of the remaining participants was 18 to 25 years old, with the median age being 20 to 22 years old. The sample included students from freshmen through senior years. A breakdown of demographic factors is found in Table 2.

Table 2

Demographic Summary

Demographic Fac	etor	LS	MF	RH	Total
Age	18-19	16	8	5	29
	20-22	6	5	22	33
	23-25	1		2	3
Sex	Female	14	9	17	40
	Male	8	3	12	23
	Other		1		1
Race	White	9	5	18	32
	Hispanic or Latino/a	3	1	1	5
	Black or African American	5	3	3	11
	Asian/Pacific Islander	4	1	5	10
	Two or More Ethnicities	2	2	1	5
	Other		1	1	2
Academic Level	Freshman	12	7	2	21
	Sophomore	9	5	9	23
	Junior	1	1	12	14
	Senior	1		6	7

Note. LS = Leadership and service Living Learning Community (n = 23), MF = Mindfulness Living Learning Community (n = 13), RH = Lives in residence hall but not a member of a Living Learning Community (n = 29). Total N = 65

Measures

For this study, Ryff's Scales of Psychological Well-Being were used to measure relationships and psychological well-being (Ryff, 1989). This inventory measures six dimensions of psychological well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. The researcher was granted permission by Dr. Carol Ryff to use her scales for the purpose of this study. The original inventory consisted of 84 questions (long form). To avoid survey fatigue, the medium form, which consisted of 54 questions, was used for the purpose of this study. A short form also exists, but has been found to be statistically unreliable.

The inventory offered a series of statements that addressed six dimensions of psychological well-being. Each scale consisted of nine items that contain both positive and negative statements. Participants rated the relevance of the statement for them from 1 (strongly disagree) to 6 (strongly agree). The overall score for each dimension was calculated by adding the numbers corresponding to the answers together. The negative statements were reverse scored. Below are the definitions for high and low scores within each dimension. See Appendix A for the full instrument and Appendix B for scoring and dimension definitions.

Autonomy

<u>High Scorer:</u> Is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards.

<u>Low Scorer:</u> Is concerned about the expectations and evaluations of others; relies on judgments of others to make important decisions; conforms to social pressures to think and act in certain ways.

Environmental Mastery

High Scorer: Has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values.

<u>Low Scorer</u>: Has difficulty managing everyday affairs; feels unable to change or improve surrounding context; is unaware of surrounding opportunities; lacks sense of control over external world.

Personal Growth

High Scorer: Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self-knowledge and effectiveness.

Low Scorer: Has a sense of personal stagnation; lacks sense of improvement or expansion over time; feels bored and uninterested with

life; feels unable to develop new attitudes or behaviors.

Positive Relations with Others

<u>High Scorer:</u> Has warm satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships.

Low Scorer: Has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships; not willing to make compromises to sustain important ties with others.

Purpose in Life

<u>High Scorer:</u> Has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living.

Low Scorer: Lacks a sense of meaning in life; has few goals or aims, lacks sense of direction; does not see purpose of past life; has no outlook or beliefs that give life meaning.

Self-Acceptance

<u>High Scorer:</u> Possesses a positive attitude toward the self; acknowledges and accepts multiple aspects of self, including good and bad qualities; feels positive about past life.

<u>Low Scorer:</u> Feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; wishes to be different than what he or she is. (Ryff, 1989, p. 1072).

In the test-retest of 20-item scales instrument, Ryff found high levels of reliability, shown in Table 3.

Table 3

Test-Retest Reliability Coefficients

Psychological Dimension	Cronbach's alpha ($\alpha >$)
Autonomy	.88
Environmental Mastery	.81
Personal Growth	.81
Positive Relations with Others	.85
Purpose in Life	.82
Self Acceptance	.85

Note: n = 117 (Ryff, 1989)

The survey also included general demographic questions, including age, sex, academic level, race, and residence hall community, in addition to asking about participants' involvement in other activities and their daily amount of social interaction. To measure involvement, participants were asked to select all that apply among the following activities: student organizations, volunteer work, community organizations, religious organizations, employment, and other. If the participants were not involved in any activities, they had the option to designate that. To measure the amount of time participants interacted socially with others each day, they were asked to report on average the number of hours per day they are socially active and engaging with others. The data gathered from the demographic inventory were not only used to analyze the population sample, but they were also used to determine if any associations existed between individual demographic factors and the six dimensions of Ryff's Scales. See Appendix B for the full list and details of all demographic questions.

Procedures

Students were recruited at residence hall meetings and Living Learning

Community class sessions and events. To incentivize participants, they were entered into a raffle for a \$25 gift card as compensation for their time. One individual was drawn and compensated.

The survey was distributed in paper form and in-person at residence hall meetings and LLC classes and events at the end of the academic year, one week before final exams. The students were asked if they would like to participate in a voluntary survey. If students chose to participate, they were given a consent form (shown in Appendix C), which described the purpose of the study and the confidentiality of the participants' responses. Consent forms were kept separate from the surveys to ensure confidentiality. In addition, students were informed that they could stop at any time without penalty. All surveys were self-administered upon consent from the participants. Completion time was approximately 10 to 20 minutes. Approximately 50% of the students participating in the mindfulness LLC completed the survey and approximately 70% of the leadership and service LLC residents completed the survey, while less than 1% of the non-LLC oncampus residents completed the survey.

CHAPTER FOUR

Quantitative data were collected and analyzed from the Ryff's Scales of Psychological Well-Being instrument and the demographic questionnaire. First, bivariate correlations of the six dimensions were analyzed. Next, the six dimensions were examined within each residence hall community using descriptive statistics and analysis of variance (ANOVA) testing and assessed to determine which residence hall community scores highest on average in each dimension of psychological well-being. Additional demographic statistics and correlations were assessed as they related to the overall population sample and the six dimensions. Note: Some respondents did not answer one or more questions. To address this issue, the median score of the skipped question, based on the respondent's affiliated subgroup, was inputted in place of a 0 to avoid skewing results.

Ryff's Six Dimensions of Psychological Well-Being Findings

Bivariate correlation tests were conducted to examine the relationships between each of the six dimensions with one another. Consistent with Ryff's (1989) intercorrelations in Table 1, significant correlations existed between all six dimensions of psychological well-being. Thirteen of the fifteen intercorrelations were significant at the 0.01 level. The relationships between autonomy and personal growth (r = .313) and autonomy and purpose in life (r = .289) were significant at the 0.05 level. Table 4 shows the Pearson correlations between Ryff's Six Dimensions of Psychological Well-Being.

Table 4

Intercorrelations of Ryff's Dimensions of Psychological Well-Being (N=65)

	1	2	3	4	5	6
1. Autonomy						
2. Environmental Mastery	.486**					
3. Personal Growth	.313*	.299*				
4. Positive Relations	.434**	.454**	.640**			
5. Purpose in Life	.289*	.633**	.558**	.548**		
6. Self Acceptance	.547**	.726**	.444**	.563**	.555**	

^{**} Correlation is significant at the 0.01 level (2-tailed).

Pearson correlations found that social interactions do impact the psychological well-being of college students. Although Pearson correlations found significant relationships between daily interactions with others and positive relations, r(63) = .262, p < .05, and purpose in life, r(63) = .266, p < .05, analysis of variance tests did not find a significant relationship among these factors, as shown in Table 5.

Table 5

Intercorrelations by Daily Interaction (N = 65)

		1	2	3
1. Daily Interaction	Pearson correlation Sig.			
2. Positive Relations	Pearson correlation	.262*		
	Sig.	.035		
3. Purpose in Life	Pearson correlation	.266*	.548**	
-	Sig.	.032	.000	

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*} Correlation is significant at the 0.05 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Residence Hall Communities and Ryff's Six Dimensions

Residence hall communities were analyzed to assess Ryff's Six Dimensions of Psychological Well-Being among the three communities. Descriptive statistics were gathered to examine the mean scores of the three communities with each dimension of psychological well-being to determine which community scored the highest in each area. Based on Ryff's scales, the highest score possible for each dimension was 54 points. The mindfulness LLC scored highest among the communities studied in three of the six dimensions: autonomy (M = 43.0, SD = 4.796), personal growth (M = 48.154, SD = 2.911), and positive relations with others (M = 46.077, SD = 5.204). Non-LLC students had the highest score in environmental mastery (M = 40.103, SD = 5.778) and purpose in life (M = 44.103, SD = 5.171), while leadership and service LLC scored highest in self-acceptance (M = 42.609, SD = 6.618). Table 6 provides the means and standard deviations of each psychological dimension for all communities.

Table 6

Residence Hall Community Measures of Psychological Well-Being (N = 65)

Psychological Measures	M	SD
Autonomy		
Leadership & service $(n = 23)$	39.217	6.708
Mindfulness $(n = 13)$	43.000	4.796
Non-LLC Students ($n = 29$)	40.690	6.867
Environmental Mastery		
Leadership & service	39.087	6.835
Mindfulness	38.769	8.308
Non-LLC Students	40.103	5.778
Personal Growth		
Leadership & service	46.261	4.474
Mindfulness	48.154	2.911
Non-LLC Students	45.586	5.329
Positive Relations		
Leadership & service	42.957	6.357
Mindfulness	46.077	5.204
Non-LLC Students	43.035	6.156
Purpose in Life		
Leadership & service	43.565	4.860
Mindfulness	41.846	6.026
Non-LLC Students	44.103	5.171
Self Acceptance		
Leadership & service	42.609	6.618
Mindfulness	40.539	7.699
Non-LLC Students	42.276	5.824

After analyzing the mean scores of the residence hall communities with each dimension of psychological well-being, analysis of variance tests were performed to determine if any significant relationships exist between the residence hall communities and the six dimensions. No significant results were found from the ANOVA tests, as seen in Table 7. This is likely due to the small and different sample sizes. Because no

significant results were found, no Post Hoc tests were run to determine the direction of each relationship.

Table 7

ANOVA by Residence Hall Community (N = 64)

		Sum of		Mean		
		Squares	df	Square	F	Sig.
Autonomy	Between	119.019	2	59.509	1.427	0.248
	Within	2586.12	62	41.712		
	Total	2705.138	64			
Environmental Mastery	Between	21.392	2	10.696	0.238	0.789
	Within	2790.823	62	45.013		
	Total	2812.215	64			
Personal Growth	Between	59.392	2	29.696	1.377	0.26
	Within	1337.162	62	21.567		
	Total	1396.554	64			
Positive Relations	Between	98.539	2	49.27	1.343	0.269
	Within	2274.845	62	36.691		
	Total	2373.385	64			
Purpose in Life	Between	46.12	2	23.06	0.839	0.437
•	Within	1704.034	62	27.484		
	Total	1750.154	64			
Self Acceptance	Between	38.359	2	19.18	0.453	0.638
-	Within	2624.502	62	42.331		
	Total	2662.862	64			

Demographic Differences in Well-Being Indexes

Within the demographic section of the survey, participants were asked how often they interact (actively converse, participate in discussion) with others on average per day. The amount of daily interaction was measured in number of hours. Of the 64 respondents (one individual did not respond), the majority of participants, 27, selected five to six

hours of social interaction with others. No respondents selected less than one hour of social interaction per day. See Table 8 for all descriptive statistics for daily interaction.

Table 8

Descriptive Statistics for Daily Interaction (N = 64)

Hours of Interaction/Day	Frequency	Percent
Less than 1 hour	0	0
1-2 hours	4	6
3-4 hours	14	22
5-6 hours	19	30
7 or more hours	27	42

After the frequencies for daily interaction were computed, ANOVA tests were run to examine any significant relationships that might exist between daily interaction measures and each dimension of psychological well-being. No significant associations were found through the analysis of variance testing. Results between daily interaction measures and the six dimensions of psychological well-being, as shown in Table 9, are as follows: autonomy, F(3, 61) = 1.115, p = .350; environmental mastery, F(3, 61) = .588, p = .625; personal growth, F(3, 61) = 1.156, p = .334; positive relations with others, F(3, 61) = 1.540, p = .213; purpose in life, F(3, 61) = 1.566, p = .207; self acceptance, F(3, 61) = .273, p = .845. No Post Hoc tests were run to determine the direction of each relationship because no significant results were found.

Analysis of variance tests were run for all other demographic factors including age, sex, academic level, number of non-academic activities, type of non-academic

activities, and grade point average (GPA) to examine any relationships between demographic factors and the six dimensions of psychological well-being.

Table 9

ANOVA by Daily Interaction (N=64)

		G C		3.7		
		Sum of		Mean		
		Squares	df	Square	F	Sig.
Autonomy	Between	140.665	3	46.888	1.115	.350
	Within	2564.474	61	42.041		
	Total	2705.138	64			
Environmental	Between	79.034	3	26.345	.588	.625
Mastery	Within	2733.181	61	44.806		
	Total	2812.215	64			
Personal Growth	Between	75.140	3	25.047	1.156	.334
	Within	1321.414	61	21.663		
	Total	1396.554	64			
Positive Relations	Between	167.054	3	55.685	1.540	.213
	Within	2206.330	61	36.169		
	Total	2373.385	64			
Purpose in Life	Between	125.165	3	41.722	1.566	.207
-	Within	1624.988	61	26.639		
	Total	1750.154	64			
Self Acceptance	Between	35.237	3	11.746	.273	.845
•	Within	2627.624	61	43.076		
	Total	2662.862	64			

Results from ANOVA testing, as seen in Table 10, showed a significant relationship between sex and the self-acceptance dimension of psychological well-being, F(3, 61) = 3.953, p = .012. No significant relationships between sex and the psychological dimensions of autonomy, F(3, 61) = 1.819, p = .153, environmental mastery, F(3, 61) = 1.82, p = .153, personal growth F(3, 61) = 1.443, p = .239, positive

relations with other, F(3, 61) = 1.121, p = .348, or purpose in life, F(3, 61) = 0.366, p = .778, were discovered, as shown in Table 9. Post Hoc tests could not be performed because at least one of the sex demographic options received fewer than two responses.

Table 10

ANOVA by Sex Demographic (N=65)

		Sum of		Mean		
		Squares	df	Square	F	Sig.
Autonomy	Between	222.182	3	74.061	1.819	0.153
•	Within	2482.957	61	40.704		
	Total	2705.138	64			
Environmental	Between	231.011	3	77.004	1.82	0.153
Mastery	Within	2581.204	61	42.315		
-	Total	2812.215	64			
Personal Growth	Between	92.554	3	30.851	1.443	0.239
	Within	1304	61	21.377		
	Total	1396.554	64			
Positive Relations	Between	123.959	3	41.32	1.121	0.348
	Within	2249.426	61	36.876		
	Total	2373.385	64			
Purpose	Between	30.936	3	10.312	0.366	0.778
•	Within	1719.217	61	28.184		
	Total	1750.154	64			
Self Acceptance	Between	433.452	3	144.484	3.953	0.012
•	Within	2229.41	61	36.548		
	Total	2662.862	64			

Note: One of the options for this demographic question received fewer the two responses, thus no Post Hoc tests could be run.

To measure academic performance and success, participants were asked to report their cumulative grade point average (GPA). As shown in Table 11, approximately 71%

of participants reported a cumulative GPA of 3.0 or better, 24.6% reported 2.0 or better, and 4.6% of participated reported less than a 2.0 cumulative GPA. Analysis of variance tests were performed with GPA as the independent factor and the six dimensions as the dependent variables. Through ANOVA testing, GPA was found to have a significant relationship with the psychological dimension of purpose in life, F(2, 62) = 3.839, p = .027, as shown in Table 12. Tukey's HSD test was used to find which means were significantly different from others as they relate to purpose in life. Based on the results from this Post Hoc test, participants who reported a 3.0 or better GPA had significantly better scores in the psychological well-being dimension of purpose in life than those who reported a GPA of 1.99 or less (p = 0.024). Additionally, participants who reported a GPA of 2.0 – 3.0 also scored significantly better than participants with less than a 2.0 in purpose in life (p = 0.025). No other significant relationships were established.

Table 11

Descriptive Statistics of Cumulative Grade Point Average (N=65)

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	3.0-4.0	46	70.8	70.8	70.8
	2.0-2.99	16	24.6	24.6	95.4
	< 2.0	3	4.6	4.6	100
	Total	65	100	100	

Overall, few significant relationships were found between the six dimensions and the demographic factors studied. Those included daily interactions and positive relations and purpose in life, sex and self-acceptance, and GPA and purpose in life. Because of the intercorrelations that exist between all dimensions shown in Table 4, the dimensions cannot be considered as completely independent from one another. Further research must be conducted using scales that more clearly measure each dimension as an independent factor to determine if the significant relationships found in this study hold true.

Table 12 ANOVA by Cumulative Grade Point Average (N = 65)

		Sum of		Mean		
		Squares	df	Square	F	Sig.
Autonomy	Between	27.100	2	13.550	.314	.732
-	Within	2678.039	62	43.194		
	Total	2705.138	64			
Environmental	Between	132.169	2	66.085	1.529	.225
Mastery	Within	2680.046	62	43.227		
•	Total	2812.215	64			
Personal Growth	Between	6.515	2	3.257	.145	.865
	Within	1390.039	62	22.420		
	Total	1396.554	64			
Positive Relations	Between	60.280	2	30.140	.808	.450
	Within	2313.104	62	37.308		
	Total	2373.385	64			
Purpose in Life	Between	192.868	2	96.434	3.839	.027
_	Within	1557.286	62	25.118		
	Total	1750.154	64			
Self Acceptance	Between	121.195	2	60.597	1.478	.236
-	Within	2541.667	62	40.995		
-	Total	2662.862	64			

CHAPTER FIVE

The purpose of this research was to add to the analysis about the impact social relationships and interactions have on psychological well-being and answer four primary research questions:

- 1) How does the frequency of social interactions impact the psychological wellbeing of college students?
- 2) Does the type of community a student is a part of influence their psychological well-being?
- 3) Is an individual's identified sex related to psychological well-being?
- 4) How do these factors correlate with academic performance/success?

A primary focus of this research was to determine the degree that social interaction impacts psychological well-being. Pearson correlations did find strong associations between social interaction and positive relations and purpose in life.

However, further analysis of variance tests did not provide the same results. Although it cannot be fully determined if significant relationships exist between social interaction and elements of psychological well-being, the findings demonstrate that further research is needed on how social interaction influences factors of psychological well-being, including positive relations and purpose in life.

This study also attempted to discover if the type of community a student engages in impacts the relationship between social interactions and psychological well-being. Students from three different residence hall communities were studied and their survey responses were compared to each dimension of psychological well-being, as well as to each other, to determine if those relationships exist. No significant correlations were found between relationships, residence hall communities, and psychological well-being. This is possibly due to several factors, including small sample sizes, the thematic emphasis of each LLC, the unequal response rate based on age, and the fact that these were all residence hall communities at the same institution, with the two LLCs residing in the same residence hall. Although no significant correlations were found through this study, further research with larger and more equal sample sizes, more diverse communities, and communities from different residence halls may yield different results. Further research could also be done to conduct qualitative analysis on each program's curricula, associated learning outcomes, and activities associated with each respective LLC, in addition to how they encourage community building.

Sex differences in psychological well-being were discovered in this study. A significant relationship between sex and the psychological dimension of self-acceptance was found, F(3, 61) = 3.953, p = 0.12, as shown in Table 9. Since no Post Hoc tests could be performed, the relationships between each of the sex demographics could not be determined. Tests did not show if females or males had higher levels of self-acceptance. Future research could be conducted with a larger sample size to more closely examine the relationship between sex and self-acceptance.

In this study, academic performance and success was measured using respondents' self-reported cumulative GPAs. After statistical analysis, no relationships were found between academic performance and daily interaction or residence hall community, but this is inconsistent with previous research that has found relationships between social interaction and academic success (Brown & Burdsal, 2012). A larger sample size might have yielded more consistent results with previous research. Further study is needed using larger sample sizes to determine if a positive relationship between social interaction and academic performance does exist. As shown in Table 12, analysis of variance tests did, however, show a significant relationship between GPA and purpose in life, F(2, 62) = 3.84, p = .027, a finding that was not discovered in the review of literature. This finding prompts questions about the association between these two variables, as well as the direction of this correlation. Future research can be done to further answer these questions with instruments that separately, and more directly, measure the variables of academic performance and purpose in life.

From analyzing the three residence halls' average scores of each psychological well-being dimension, it was found that the mindfulness LLC participants scored higher on average in three of the six dimensions; autonomy, personal growth, and positive relations as shown in Table 13. Additionally, when combining all dimension scores for each residence hall community and analyzing the means, it was found that the mindfulness LLC scored highest overall among the three communities (M = 258.385, n = 13), while the participants who are not in an LLC had the second highest average (M = 255.793, n = 29). It is important to note that students apply to be members of the various

LLCs and might already have certain motivating characteristics that inform this finding. Another reason that the mindfulness LLC might have scored highest overall is its focus on several facets of well-being, including emotional, mental, and physical well-being. Future studies could be conducted to determine if students living in the mindfulness LLC consistently show higher levels of autonomy, personal growth, and positive relations with others. Further studies also could assess the mindfulness LLC to determine what elements of the community and/or curriculum most strongly support the six dimensions in comparison to other LLCs.

Table 13

Mean Total Scores of Ryff's Dimensions by Residence Hall Community (N=65)

	n	M	SD
Leadership & service	23	253.696	27.85912
Mindfulness	13	258.385	27.83744
Not in LLC	29	255.793	27.38271

Note: The mean score was calculated after added the score for each dimension together for every participant to obtain an overall psychological well-being score.

Limitations

Several limitations exist in this study. A limitation of this study was the use of self-reported data. It is likely that inaccuracies were reported because of self-report bias. Participants might have answered questions differently depending on their mood and emotional state when taking the test. Participants also might have been influenced by the presence of others while they were completing the survey. Therefore, it is difficult to

gather accurate assessments of all participants. Additionally, self-selection bias, or people who choose to participate versus people who choose not to participate, limits the ability to generalize the findings of the sample to the population.

Another limitation of self-report is incomplete surveys. Three surveys were unable to be used because the participants answered less than 50 percent of the questions. Several other surveys were missing answers to one or more items, impacting the overall score for the corresponding psychological dimension. To avoid skewing results, this issue was addressed by using the respondent's affiliated subgroup's median score of the skipped item.

Individuals might also interpret questions and statements differently than the way the instruments' author intended. For instance, several of the participants left notes on their surveys indicating that they did not know how to interpret the last statement on the instrument: "When I compare myself to friends and acquaintances, it makes me feel good about who I am."

This study was also limited because of the small population sample. Only 65 students participated in the study. The small population sample can contribute to statistical inaccuracies and the inability to generalize the results among the population. Additionally, the different sample sizes across the communities violate one of the main assumptions of an analysis of variance test, which assumes that all sample sizes are equal. Although the results were inconclusive, some other significant correlations were discovered and could lead to further exploration.

Implications for Future Research

There are several implications for future research in the area of psychological well-being. Although no conclusive evidence was found to answer the research question addressing residence hall communities and their influence on psychological well-being, further research can be conducted that includes a variety of other residence hall communities and LLCs to participate in the study. This would be beneficial because it would help determine if the relationships formed in different residence hall communities do impact psychological well-being. If results indicated a link, researchers could delve deeper to the distinct attributes of certain residence hall communities that more effectively promote and support social relationships among college students. More conclusive findings might result from a more robust sample size.

An additional implication is the involvement of off-campus or non-residential students in the study of community relationships and psychological well-being.

Including off-campus students could provide a means of assessing the differences in psychological well-being between residential and non-residential students.

Future research could also take into consideration the various modalities of social interaction that students use in relationship building and how these might influence the quality of the students' relationships. For instance, do students perceive greater social support and positive relations from face-to-face interaction, social media engagement, or text communication? Is the quality of the relationships or the quantity of social interactions a greater predictor of psychological well-being? Answering questions such as these would help to further the understanding and impact of social relationships on college students.

While conducting this study, several additional questions arose from the analyses, which suggested connections between factors that were not directly examined in this study. For example, in conducting statistical analyses, a relationship between the number of activities a student participates in and measures of purpose in life was found. Bivariate correlation analysis showed a significant relationship between the number of activities and the psychological dimension of purpose in life, r(63) = .253, p < .05. Future research could examine this relationship and other possible factors that might contribute to this relationship, such as type of activities, including relationships with mentors. Findings from independent t-tests suggested that involvement in student organizations significantly related to personal growth, t(63) = 2.47, p = .016, $\alpha = .05$. Further research could be conducted to determine if involvement in student organizations in general during college is related to personal growth or if the type of activity has a primary influence.

Although this research did not yield strong results to suggest a relationship between these factors, a significant amount of research demonstrates a strong connection between social relationships and psychological well-being. Further research can build upon the foundation of the present study to evaluate the association between the relationships developed in various campus communities and psychological well-being using a larger population sample. A larger population sample could include more equal distribution of representative samples of each group and more diverse campus communities, such as religious organizations, social organizations, and service organizations. If higher education professionals can tap into what factors contribute to

higher levels of psychological well-being among students, they can more effectively advise students and design experiences that promote relationship building throughout students' college careers.

APPENDIX A

RYFF Scales of Psychological Well-Being

The following set of statements deals with how you might feel about yourself and your life. Please remember that there are neither right nor wrong answers.

	ele the number that best describes the degree to ch you agree or disagree with each statement.	Strongly Disagree	Disagree	Disagree Slightly	Agree Slightly	Agree	Strongly Agree
1.	Most people see me as loving and affectionate.	1	2	3	4	5	6
2.	I am not afraid to voice my opinion, even when they are in opposition to the opinions of most people.	1	2	3	4	5	6
3.	In general, I feel I am in charge of the situation in which I live.	1	2	3	4	5	6
4.	I am not interested in activities that will expand my horizons.	1	2	3	4	5	6
5.	I live life one day at a time and don't really think about the future.	1	2	3	4	5	6
6.	When I look at the story of my life, I am pleased with how things have turned out.	1	2	3	4	5	6
7.	Maintaining close relationships has been difficulty and frustrating for me.	1	2	3	4	5	6
8.	My decisions are not usually influenced by what everyone else is doing.	1	2	3	4	5	6
9.	The demands of everyday life often get me down.	1	2	3	4	5	6
10.	I don't want to try new ways of doing things—my life is fine the way it is.	1	2	3	4	5	6
11.	I tend to focus on the present, because the future always brings me problems.	1	2	3	4	5	6

^{*}The Ryff Scales of Psychological Well-Being instrument is used with permission from Dr. Carol Ryff, University of Wisconsin, Institute on Aging.

^{**}The following 9-item Questionnaire was adapted from Ryff (1989) and Wabash National Study http://www.liberalarts.wabash.edu/study-instruments/#ryff

	le the number that best describes the degree to ch you agree or disagree with each statement.	Strongly Disagree	Disagree	Disagree Slightly	Agree Slightly	Agree	Strongly Agree
12.	In general, I feel confident and positive about myself.	1	2	3	4	5	6
13.	I often feel lonely because I have few close friends with whom to share my concerns.	1	2	3	4	5	6
14.	I tend to worry about what other people think of me.	1	2	3	4	5	6
15.	I do not fit very well with the people and the community around me.	1	2	3	4	5	6
16.	I think it is important to have new experiences that challenge how you think about yourself and the world.	1	2	3	4	5	6
17.	My daily activities often seem trivial and unimportant to me.	1	2	3	4	5	6
18.	I feel like many of the people I know have gotten more out of life than I have.	1	2	3	4	5	6
19.	I enjoy personal and mutual conversations with family members or friends.	1	2	3	4	5	6
20.	Being happy with myself is more important to me than having others approve of me.	1	2	3	4	5	6
21.	I am quite good at managing the many responsibilities of my daily life.	1	2	3	4	5	6
22.	When I think about it, I haven't really improved much as a person over the years.	1	2	3	4	5	6
23.	I don't have a good sense of what it is I'm trying to accomplish in my life.	1	2	3	4	5	6
24.	I like most aspects of my personality.	1	2	3	4	5	6
25.	I don't have many people who want to listen when I need to talk.	1	2	3	4	5	6
26.	I tend to be influenced by people with strong opinions.	1	2	3	4	5	6
27.	I often feel overwhelmed by my responsibilities.	1	2	3	4	5	6
28.	I have a sense that I have developed a lot as a person over time.	1	2	3	4	5	6
29.	I used to set goals for myself, but that now seems a waste of time.	1	2	3	4	5	6
30.	I made some mistakes in the past, but I feel that all in all everything has worked out for the best.	1	2	3	4	5	6
31.	It seems to me that most other people have more friends than I do.	1	2	3	4	5	6

	ele the number that best describes the degree to ch you agree or disagree with each statement.	Strongly Disagree	Disagree	Disagree Slightly	Agree Slightly	Agree	Strongly Agree
32.	I have confidence in my opinions, even if they are contrary to the general consensus.	1	2	3	4	5	6
33.	I generally do a good job of taking care of my personal finances and affairs.	1	2	3	4	5	6
34.	I do not enjoy being in new situations that require me to change my old familiar ways of doing things.	1	2	3	4	5	6
35.	I enjoy making plans for the future and working to make them a reality.	1	2	3	4	5	6
36.	In many ways, I feel disappointed about my achievements in my life.	1	2	3	4	5	6
37.	People would describe me as a giving person, willing to share my time with others.	1	2	3	4	5	6
38.	It's difficult for me to voice my own opinions on controversial matters.	1	2	3	4	5	6
39.	I am good at juggling my time so that I can fit everything in that needs to be done.	1	2	3	4	5	6
40.	For me, life has been a continuous process of learning, changing, and growth.	1	2	3	4	5	6
41.	I am an active person in carrying out the plans I set for myself.	1	2	3	4	5	6
42.	My attitude about myself is probably not as positive as most people feel about themselves.	1	2	3	4	5	6
43.	I have not experienced many warm and trusting relationships with others.	1	2	3	4	5	6
44.	I often change my mind about decisions if my friends or family disagree.	1	2	3	4	5	6
45.	I have difficulty arranging my life in a way that is satisfying to me.	1	2	3	4	5	6
46.	I gave up trying to make big improvements or change in my life a long time ago.	1	2	3	4	5	6
47.	Some people wander aimlessly through life, but I am not one of them.	1	2	3	4	5	6
48.	The past has its ups and downs, but in general, I wouldn't want to change it.	1	2	3	4	5	6
49.	I know that I can trust my friends, and they know they can trust me.	1	2	3	4	5	6
50.	I judge myself by what I think is important, not by the values of what others think is important.	1	2	3	4	5	6

	cle the number that best describes the degree to ch you agree or disagree with each statement.	Strongly Disagree	Disagree	Disagree Slightly	Agree Slightly	Agree	Strongly Agree
51.	I have been able to build a home and a lifestyle for myself that is much to my liking.	1	2	3	4	5	6
52.	There is truth to the saying that you can't teach an old dog new tricks.	1	2	3	4	5	6
53.	I sometimes feel as if I've done all there is to do in life.	1	2	3	4	5	6
54.	When I compare myself to friends and acquaintances, it makes me feel good about who I am.	1	2	3	4	5	6

APPENDIX B

Item numbers 4, 5, 7, 9, 10, 11, 13,14,15,17,18, 22, 23, 25, 26, 27, 29, 31, 34, 36, 38, 42, 43, 44, 45, 46, 52, 53 in the above are reverse scored.

The Scoring Guide was adapted from Ryff (1989) and Wabash National Study http://www.liberalarts.wabash.edu/study-instruments/#ryff

Below are the items listed by scale. Reverse-scored items are labeled "rs."

Autonomy

The extent to which students view themselves as being independent and able to resist social pressures

Definitions:

<u>High Scorer:</u> Is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards.

Low Scorer: Is concerned about the expectations and evaluations of others; relies on

judgments of others to make important decisions; conforms to social pressures to think and act in certain ways.

- 1. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.
- 2. My decisions are not usually influenced by what everyone else is doing.
- 3. I tend to worry about what other people think of me. (rs)
- 4. Being happy with myself is more important to me than having others approve of me.
- 5. I tend to be influenced by people with strong opinions. (rs)
- 6. I have confidence in my opinions, even if they are contrary to the general consensus.
- 7. It's difficult for me to voice my own opinions on controversial matters. (rs)
- 8. I often change my mind about decisions if my friends or family disagree. (rs)

9. I judge myself by what I think is important, not by the values of what others think is important.

Environmental Mastery

The extent to which students feel in control of and able to act in the environment

Definitions:

<u>High Scorer</u>: Has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values. <u>Low Scorer</u>: Has difficulty managing everyday affairs; feels unable to change or improve surrounding context; is unaware of surrounding opportunities; lacks sense of control over external world.

- 1. In general, I feel I am in charge of the situation in which I live.
- 2. The demands of everyday life often get me down. (rs)
- 3. I do not fit very well with the people in the community around me. (rs)
- 4. I am quite good at managing the many responsibilities of my daily life.
- 5. I often feel overwhelmed by my responsibilities. (rs)
- 6. I generally do a good job of taking care of my personal finances and affairs.
- 7. I am good at juggling my time so that I can fit everything in that needs to be done.
- 8. I have difficulty arranging my life in a way that is satisfying to me. (rs)
- 9. I have been able to build a home and a lifestyle for myself that is much to my liking.

Personal Growth

The extent to which students have a sense of continued development and self-improvement

Definitions:

<u>High Scorer:</u> Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self knowledge and effectiveness.

<u>Low Scorer:</u> Has a sense of personal stagnation; lacks sense of improvement or expansion over time; feels bored and uninterested with life; feels unable to develop new attitudes or behaviors.

- 1. I am not interested in activities that will expand my horizons. (rs)
- 2. I don't want to try new ways of doing things—my life is fine the way it is. (rs)
- 3. I think it is important to have new experiences that challenge how you think about

- yourself and the world.
- 4. When I think about it, I haven't really improved much as a person over the years. (rs)
- 5. I have a sense that I have developed a lot as a person over time.
- 6. I do not enjoy being in new situations that require me to change my old familiar ways of doing things. (rs)
- 7. For me, life has been a continuous process of learning, changing, and growth.
- 8. I gave up trying to make big improvements or changes in my life a long time ago. (rs)
- 9. There is truth to the saying that you can't teach an old dog new tricks. (rs)

Positive Relations with Others

The extent to which students have satisfying, trusting relationships with other people

Definitions:

<u>High Scorer:</u> Has warm satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships.

<u>Low Scorer:</u> Has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships; not willing to make compromises to sustain important ties with others.

- 1. Most people see me as loving and affectionate.
- 2. Maintaining close relationships has been difficult and frustrating for me. (rs)
- 3. I often feel lonely because I have few close friends with whom to share my concerns. (rs)
- 4. I enjoy personal and mutual conversations with family members or friends.
- 5. I don't have many people who want to listen when I need to talk. (rs)
- 6. It seems to me that most other people have more friends than I do. (rs)
- 7. People would describe me as a giving person, willing to share my time with others.
- 8. I have not experienced many warm and trusting relationships with others. (rs)
- 9. I know that I can trust my friends, and they know that they can trust me.

Purpose in Life

The extent to which students hold beliefs that give life meaning

Definitions:

<u>High Scorer:</u> Has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living.

<u>Low Scorer:</u> Lacks a sense of meaning in life; has few goals or aims, lacks sense of direction; does not see purpose of past life; has no outlook or beliefs that give life meaning.

- 1. I live one day at a time and don't really think about the future. (rs)
- 2. I tend to focus on the present, because the future always brings me problems. (rs)
- 3. My daily activities often seem trivial and unimportant to me. (rs)
- 4. I don't have a good sense of what it is that I am trying to accomplish in my life. (rs)
- 5. I used to set goals for myself, but that now seems a waste of time. (rs)
- 6. I enjoy making plans for the future and working to make them a reality.
- 7. I am an active person in carrying out the plans I set for myself.
- 8. Some people wander aimlessly through life, but I am not one of them.
- 9. I sometimes feel as if I've done all there is to do in life. (rs)

Self-Acceptance

The extent to which students have a positive attitude about themselves

Definitions:

<u>High Scorer:</u> Possesses a positive attitude toward the self; acknowledges and accepts multiple aspects of self, including good and bad qualities; feels positive about past life. <u>Low Scorer:</u> Feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; wishes to be different than what he or she is.

- 1. When I look at the story of my life, I am pleased with how things have turned out.
- 2. In general, I feel confident and positive about myself.
- 3. I feel like many of the people I know have gotten more out of life than I have. (rs)
- 4. I like most aspects of my personality.
- 5. I made some mistakes in the past, but I feel that all in all everything has worked out for the best.
- 6. In many ways, I feel disappointed about my achievements in my life. (rs)
- 7. My attitude about myself is probably not as positive as most people feel about themselves. (rs)
- 8. The past had its ups and downs, but in general, I wouldn't want to change it.
- 9. When I compare myself to friends and acquaintances, it makes me feel good about who I am.

APPENDIX C

	e following are demographic questions that were asked before participants completed Ryff's Scales of Psychological Well-Being instrument:
1.	Age: □ 18-19 □ 20-22 □ 23-25 □ >25
2.	Sex: ☐ Female ☐ Male ☐ Other ☐ Prefer not to disclose
3.	Race/Ethnicity: White Hispanic or Latino Black or African American American Indian or Alaska Native Asian/Pacific Islander Two or More Ethnicities Other
4.	Academic Level: Freshman Sophomore Junior Senior
5.	Which Residence Hall community are you apart of? ☐ Leadership and service - Living Learning Community ☐ Mindfulness - Living Learning Community ☐ I do not live in a Living Learning Community
6.	What non-academic activities are you involved in? (Select all that apply) ☐ Student Organizations ☐ Volunteer Work ☐ Community Organizations (outside of Mason) ☐ Employment ☐ Religious Organizations ☐ Other ☐ None
7.	What grades do you receive on average? □ A □ B □ C □ D □ F
8.	What is your cumulative grade point average? □ $3.5 - 4.0$ □ $3.0 - 3.49$ □ $2.5 - 2.99$ □ $2.0 - 2.49$ □ $1.5 - 1.99$ □ $1.0 - 1.49$ □ < 1.0
9.	On average, how many hours a day do you interact (actively converse, participate in discussion) with others? Less than 1 hour

APPENDIX D

Social Relationships and Psychological Well-Being Survey Consent Form

You are being asked to take part in a research study of how social relationships impact the psychological well-being of college students. I am asking you to take part because you live in one of three residence hall communities at George Mason University that I am studying for my Master's thesis research. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

What the study is about: The purpose of this study is to learn about the impact social relationships among college peers can have on psychological health and well-being.

What I will ask you to do: If you agree to be in this study, you will answer demographic questions and general inquiries about your social relationships, in addition to completing a 54-item Likert scale survey. The survey provides statements that focus on how you feel about yourself. You will select the number (1-6) corresponding to the degree to which you agree or disagree with the statement. The survey in its entirety will take approximately 20-30 minutes to complete.

Risks and benefits: There is the risk that you may find some of the statements within the survey to be sensitive in nature. There are no direct benefits to you as a participant in the study.

Compensation: Your name will be entered into a raffle for a \$25.00 Target gift card.

Your answers will be confidential. The records of this study will be kept private. In any sort of report that is made public, no personally identifiable information will be provided. Research records will be kept in a password protected filing software program; only I, the researcher, will have access to the records.

Taking part is voluntary: Taking part in this study is completely voluntary. You may skip any questions that you do not want to answer. If you decide not to take part or to skip some of the questions, you will not be penalized in any way. If you decide to take part, you are free to withdraw at any time.

If you have questions: The researcher conducting this study is EmilyAnn Walrath, a Master of Arts in Interdisciplinary Studies candidate at George Mason University. Please

ask any questions you have now. If you have questions later, you may contact EmilyAnn Walrath at ebrueck@gmu.edu. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) through the Office of Research Integrity & Assurance (ORIA) at irb@gmu.edu. You may also report any concerns or complaints anonymously through ORIA by going to http://oria.gmu.edu/report-compliance-concern/. You may print a copy of this form to keep for your records.

Statement of Consent: I have rea	nd the above information in its entirety and have
5 1	that I have asked. I understand that by typing my name onically signing this consent form.
Your Signature	Date
This consent form will be kept by the study	the researcher for at least three years beyond the end of

APPENDIX E [table from image file]

		Ţ	7	5	4	0	0	1	o	7	10	11	77	13	14	q	16	17	18	13	22
	1 1	1																			
	Sig.																				
	= 1	600	1																		
	Sig	.945																			
	= 1	.036	103	1																	
	Sig.	277.	414																		
Level	= 1	.595	182	075	1																
	Sig.	000	.147	.551																	
e Hall	11	.432**	045	095	.536"	١															
	Sig	000	.721	449	000																
J.	= 1	.091	178	.083	.033	334"															
	Sig	.471	.157	.510	.792	700.															
	= 1	011	-270	.131	.081	104	.584"	I													
	Sig	930	.030	299	519	409	000														
	= 1	065	253*	.045	063	366	669	.331"	1												
	Sig.	609	.042	.720	.618	.001	000	.007													
ity	= 1	169	-249	.129	.134	181	.449	004	.380**	1											
	Sig.	179	.046	307	289	.150	000	776	.002												
53	= 1	660	170	160	026	-220	.466"	124	.136	.048	1										
	Sig.	.432	.175	203	.835	870.	000	325	278	.703											
ment	= 1	203	.163	.061	206	.105	.445"	214	.173	067	600	1									
	Sig	.105	194	.630	.100	404	000	780.	.168	.597	.945										
	= 1	146	034	5000	-233	092	197	017	052	.032	.112	182	ı								
	Sig.	245	785	696	.062	.468	.117	896	619	.803	374	.148									
	= 1	-229	.051	.141	298	079	-214	107	236	-1111	141	.026	037	ı							
	Sig.	190	.684	262	.016	.533	.087	398	020	380	.263	.837	2772								
teraction	= 1	980'-	059	.094	110	120	.260	.164	238	711.	.144	.117	081	500.	ı						
	Sig	764.	.643	.454	382	.342	.036	191	050	.352	.252	355	521	896							
ny	= 1	002	.139	860	.045	.092	150	127	151	103	.011	049	.036	.085	136	1					
	Sig.	984	270	.439	.720	.467	232	313	230	.412	.933	.701	911	200	.281						
mental	= 1	.172	.010	366	.255	.071	.047	137	890.	920.	.116	029	780.	-217	.142	.486	1				
	Sig.	171	936	.003	.040	572	709	276	592	548	357	.817	.492	.082	260	000					
Growth	= 1	212	060	890	.050	075	216		198	010	.051	.127	-270	059	214	.313*	.299*	1			
	Sig.	060	.475	.592	695	.554	.084	.016	.115	936	889	.312	.030	.642	980	.011	.015				
	= 1	.177	.012	660	063	005	010	.075	600-	029	029	090-	038	1111	.797	.434	.424	.640	1		
	Sig	.159	927	.431	.617	696	937	.551	.943	.821	.821	.638	.763	377	.035	000	000	000			
m Life	= 1	252	127	-247	220	.054	.253	128	179	191	197	055	015	324"	.766	.289	.633	.558	.548**	1	
	Sig	.043	315	.047	.078	699	.042	310	.153	.127	911.	999	904	800	.032	.020	000	000			
septance	= 1	.063	112	185	.122	017	.028	960	.050	.113	038	084	610	150	.082	.547**	.726	.444	.563	.222	1

ion is significant at the 0.01 level (2-tailed). In is significant at the 0.05 level (2-tailed).

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EmilyAnn Walrath graduated from Notre Dame High School, Burlington, Iowa, in 2009. She received her Bachelor of Arts in Psychology from the University of Northern Iowa in 2013. She was employed as a graduate professional assistant for two years at George Mason University while pursuing her Master of Arts degree and currently works in the Alumni Relations office at American University as the Alumni Programs Assistant.