

ABSTRACT

Student Engagement in a Residential College

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Student engagement is highly valued in institutions of higher learning because of its effects on other areas of student experiences. In efforts to increase engagement, many institutions have implemented measures such as living-learning programs, which marry the residential experience with an academic discipline or focus. Numerous institutions have also created systems of residential colleges, based on the ancient structure at Cambridge University and Oxford University. Many of these residential colleges employ systems to quantitatively measure and record student participation via “points”. Administrators use these “points” records to determine whether a resident is adequately involved in the residential community. However, little research, if any, has been done on the effects of having a points system. Points allow for a quantitative measurement of involvement beyond self-reports, and this thesis takes advantage of this fact to research the effects of student experiences and characteristics on actual levels of engagement in a residential college.

Student Engagement in a Residential College

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TABLE OF CONTENTS

LIST OF TABLES	v
ACKNOWLEDGMENTS	vi
CHAPTER ONE	1
Introduction.....	1
<i>Purpose</i>	2
<i>Conceptual Framework</i>	3
CHAPTER TWO	7
Literature Review.....	7
<i>Engagement: Involvement and Motivation Models</i>	7
<i>Why Engagement is Important</i>	13
<i>What Impacts Engagement</i>	14
<i>How Engagement Relates to Community</i>	16
<i>Points Systems</i>	25
<i>The Need for a Study</i>	27
CHAPTER THREE	28
Methodology.....	28
<i>Research Design</i>	28
<i>Data Collection</i>	28
<i>Variables and Scale</i>	29
<i>Validity</i>	32

CHAPTER FOUR.....	34
Results.....	34
<i>Data Screening Process</i>	34
<i>Reliability</i>	35
<i>Regression</i>	36
<i>Limitations</i>	39
CHAPTER FIVE	40
Discussion.....	40
<i>Implications for Theory</i>	40
<i>Implications for Current Practice</i>	46
<i>Future Research and Recommendations</i>	48
<i>Conclusion</i>	49
APPENDIX A.....	51
Survey Questions	51
REFERENCES	67

LIST OF TABLES

TABLE 1.....	38
Means, Standard Deviations, Intercorrelations	
TABLE 2.....	40
Regression Analysis Summary	

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CHAPTER ONE

Introduction

Student engagement is highly valued in institutions of higher learning because of its measured effects on other areas of student experiences, such as retention and academic success. In efforts to increase engagement, many institutions have implemented measures such as living-learning programs, which marry the residential experience with an academic discipline or focus. Numerous institutions have also created systems of residential colleges, based on the ancient structure at Cambridge University and Oxford University (O'Hara, 2012). One such system is gradually emerging at Baylor University in small stages. Baylor's inaugural residential college began housing students in 2007.

Brooks Residential College at Baylor University provides programming for residents and makes known to students that certain expectations exist concerning involvement. In the past two years, the college leadership – which includes faculty, staff, and students – implemented a system to quantitatively measure and record student participation: a *points* system. Students sign in at events to earn points; the first year, 50 points per semester was the goal, although the amount was arrived at arbitrarily. There is no specific minimum requirement this year, although points are still recorded.

The leadership of Brooks College uses these point records to determine whether a resident is adequately involved in the residential community. While other residential college systems at other higher education institutions exist, little research, if any, has been done on the effects of having a points system. Although there is a vast amount of research on student engagement, these studies primarily rely on self-reports. Points allow

for a quantitative measurement of involvement that goes beyond self-perception and self-reports, and there is subsequently potential to research the effects of student experiences and characteristics on actual levels of engagement in residential colleges.

Purpose

Scholars know little about engagement in residential colleges or what makes students more or less engaged in these communities. Moreover, administrators do not know which programs, activities, interactions, and environments encourage higher participation from students. Ample research has been done on engagement in the college experience, and even on engagement in residence halls. However, no studies specifically address engagement outcomes in residential colleges.

Jessup-Anger (2011) examined the impact of residential colleges on students' desire to learn, but she focused on the academic aspect. As this residential community option is increasing in number in the nation's colleges and universities, it seems appropriate to examine more closely the various aspects of programming and student attributes as they relate to engagement in those communities.

I approach this study from a postpositivist perspective, a philosophy positing there are causes behind outcomes. For example, I hypothesize that there are reasons (causes) why students are engaged (outcome), and that these variables can be quantified. This epistemology looks for measurements of what can be observed. I wish to measure the level of engagement of individual students, and to do so I am studying their behavior. However, I am not only studying behavior; I also need to know how students *feel*, because feelings are a reality of the student experience, though more difficult to define, measure, and categorize (Creswell, 2009). In light of the postpositivist worldview, I am

looking for sources of prediction (Creswell, 2009). Of course, absolute proof is unattainable, and evidence is not perfect, but I will look for relationships between variables in the hopes of arriving at a conclusion that can explain what is taking place regarding student engagement in Brooks College.

The primary question of this study is: How do student characteristics and experiences relate to student engagement in a residential college community? From this, I will attempt to understand how to reasonably predict engagement based on student characteristics and experiences in the residential college community.

Conceptual Framework

Engagement

Alexander Astin's (1984) definition of student involvement provides a starting point for the concept of engagement – "...student involvement refers to the amount of physical and psychological energy that the student devotes to the academic experience" (Astin, 1984, p. 297). Astin focuses particularly on student learning and the idea that involvement is necessary for successful education. Rather than solely classroom learning, this current study focuses on overall engagement in a residential community.

While Astin (1984) defines involvement as primarily behavioral, and while I acknowledge behavior as one aspect of engagement, I will define engagement differently. Therefore, I will not use the term *involvement* interchangeably with *engagement*. Astin also notes that psychologists often refer to this concept as *motivation*; he chooses not to use this term because it is primarily psychological in nature. While I also acknowledge psychological aspects as part of engagement, combining the behavioral and the

psychological aspects forms the best definition of engagement. Motivation gets at how a student *feels*, while points or some other method of measurement reflect what a student is truly willing to *do*. Therefore, I define engagement as a way of being in a community that consists of physical (behavioral) participation as well as psychological investment.

Self-determination theory (SDT), notes Jessup-Anger (2012), incorporates two aspects of motivation: 1) students' belief about whether they can perform a task (expectancy), and 2) students' belief about whether something is worthwhile. Deci and Ryan (2000) outline SDT's three posited needs of students that must be met in order to proceed with development. These three needs are autonomy, competence, and relatedness, and they also relate to intrinsic motivation (Deci & Ryan, 2002).

It is also important to consider that students will have different motivations because students may behave in a certain manner without being psychologically engaged. In the current case, students may attend many events in order to acquire points for whatever benefits are promised, but they may not truly feel part of the community or care about it in any deeper way. By contrast, students may feel part of the community but may never show it with their actions. Both scenarios pose problems. This study seeks to discover what connection exists between points, motivation, and sense of belonging.

One reason involvement is important for students is that "community activities may influence their personal development" (Arboleda, et al., 2003, p. 518). This development involves forming one's identity, friendships, and sense of community. It is safe to assume here that if behavioral involvement impacts these variables, engagement, which includes behavioral and psychological elements, would certainly do the same, if not to a greater extent. Arboleda et al. (2003) also note that involvement impacts

satisfaction with the living environment, or community. While satisfaction is not the only or primary goal of living communities, it does increase student tendency to become involved. There is a close relationship between the two concepts, one that is cyclical; involvement leads to satisfaction, and satisfaction leads to more involvement (Arboleda et al., 2003).

Astin (1984) posited that persistence often has to do with “the student’s ability to identify with the institution. It is easier to become involved when one can identify with the college environment” (p. 303). In terms of a residential college, this would mean that students may need to feel they belong in the community before they commit to participating. While it is certainly easier to commit to a group of people we know accept us, it is also important to acknowledge that there are times when we may develop a sense of belonging *through* our commitment to and engagement in the community.

Terms

The following are several terms that I use in later chapters.

Engagement: a way of being in a community that consists of physical (behavioral) participation as well as psychological investment.

Experiences (particularly within a community): the aggregate interactions a student has with an environment.

Characteristics: attributes of a student which he or she most likely brings to college (such as family background, culture, or gender); can also include attitudinal factors.

Living-learning program: a residential community with an intellectual or academic element or focus; found in many different formats across the United States.

Residential college: a community of students from all disciplines in a university who live in proximity to one another in a residential facility; these communities are faculty-led.

Brooks Residential College: Baylor University's seminal residential college, and the object of this study.

Points system: a method of tracking students' participation in a residential college by counting each event attended for a certain amount of points; points accumulate over a term and are used to determine students' involvement levels.

CHAPTER TWO

Literature Review

Engagement: Involvement and Motivation Models

Alexander Astin (1984) began the conversation on student involvement nearly 30 years ago when he developed a theory around the concept. His theory provides a foundation for understanding student involvement, defining it as “the investment of physical and psychological energy in various objects,” specifically those relating to the academic experience (Astin, 1984, p. 298). Astin says involvement, which can be measured quantitatively and qualitatively, moves along a continuum. In this theory, students need to be active in their environment and learning process. Although Astin posits that motivation is key to involvement, representing the psychological aspect, his theory also takes the concept further by considering the behavioral aspect as well.

Many years earlier, Lewin (1936) set forth a model for a similar view of involvement with perceptions (psychological) and behaviors. He suggests that behavior is the function of a person and his or her environment: $B(f) = ExP$. More recently, Milem and Berger (1997) discuss Astin’s, Lewin’s (1936), and Tinto’s (1993) conceptualizations of involvement. They note that involvement is a sort of vehicle to help students reach incorporation – the relinquishing of old associations and the adopting of “new norms and behavioral patterns...appropriate to the specific context of their college or university” (Milem & Berger, 1997, p. 389). If, following Lewin’s findings, students do behave a certain way as a result of their interactions with their environment, the environment may have an impact on student motivation. The psychological and the

behavioral, while distinct, are closely related. The arguments of these scholars overlap with an important concept: behavior (involvement of many types) influences perceptions, which in turn influence continued (or discontinued) involvement. This is the behavior-perception-behavior cycle. Furthermore, discontinued involvement can impact student persistence or departure.

Kuh, Kinzie, Schuh, and Whitt (2005) provide two components of student engagement, the first of which is similar to Astin's concept of involvement. This includes the time and effort that students give to their various activities and that lead students to experiences that contribute to their success. The second component consists of the institution's role – the resources and opportunities provided to students to increase their participation in those experiences.

This second element expands on Astin's definition of involvement to demonstrate that two parties are responsible for a student's success: the student and the institution. Scholars of retention have also advocated this two-party concept (Tinto, 1993; Braxton et al., 2000). Kuh et al. (2005) cite Chickering and Gamson's (1987) "Seven Principles for Good Practice in Undergraduate Education" as exemplary measures of an institution's fulfillment of its responsibility. These principles are: 1) encouraging student-faculty interaction, 2) developing reciprocity and cooperation among students, 3) encouraging active learning, 4) giving prompt feedback, 5) emphasizing time on task, 6) communicating high expectations, and 7) respecting diverse talents and ways of learning. Kuh et al. note that these are areas an institution can control, whereas student involvement is somewhat out of its ability to control. The authors spend the rest of their book discussing various elements of institutional actions which contribute to student

engagement. They explore the different methods of numerous institutions classified as “documenting effective educational practice,” or “DEEP.” These colleges stand out due to their high graduation rates and scores on the National Survey of Student Engagement; their methods include a focus on curriculum and out-of-class activities.

Regarding institutional practices and their influence on engagement, George Kuh developed the National Survey of Student Engagement (NSSE) in 1998 (“About NSSE”). The survey is designed to measure student behaviors relative to learning outcomes and good practices (Wolf-Wendel et al.), asking students to self-report how they spend their time, how they feel about themselves, and their reflections on their experiences. The NSSE results can reveal institutional effectiveness in five areas: academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment. The survey focuses on activities which have been shown to be connected to positive outcomes for student success. Other measures of student experiences, such as the Cooperative Institutional Research Program (CIRP) are broader in scope.

As widely used as NSSE results are, the instrument is not without critics. Some of the most adamant critiques have to do with the element of self-reporting. Porter (2011) notes that student self-reporting is not reliable or accurate for questions that ask them to think back further than one week or to reflect on their learning gains. Furthermore, he calls his readers to remember that much research shows that these kinds of questions do not glean accurate answers from most people. Campbell and Cabrera (2011) express concern that NSSE studies’ benchmarks have poor construct validity and do not measure “distinct domains of student engagement;” they also are not linked

strongly enough to student outcomes. At the least, Campbell and Cabrera question the wisdom of applying NSSE results to determine institutional quality and to predict student outcomes. These criticisms are not the only ones, and it is necessary to seriously consider them when designing a study on student engagement (or any study which depends upon student self-reporting).

Wolf-Wendel, Ward, and Kinzie (2009) explore the differences between the terms “involvement” and “engagement,” using Astin’s (1984) and Kuh et al.’s (2005) definitions. Despite the fact that existing research provides these definitions, as does the NSSE, the term engagement is still used for a number of different concepts and phenomena. Wolf-Wendel et al. hone the definition, with the NSSE as a foundation. Engagement as defined by Kuh and his colleagues involves the institution and good practice, creating a holistic understanding of the concept. This definition, in conjunction with the NSSE, assists institutions in improving because they are able to more directly measure their own practices and how students are responding.

The terms involvement and engagement are used interchangeably. There is clearly overlap between them, making it easy to substitute one for the other. Harper (2008) notes an important distinction, however. A student may be involved (putting forth effort into an experience) without being engaged (participating in experiences designed to lead to success). An essential component of engagement, therefore, is depth of experience, in addition to the amount of student effort (Wolf-Wendel et al., 2009). The depth of experience possible is often a result of institutional effort, something colleges and universities *can* influence and for which they are responsible. There is a relationship

between students and institutions; therefore, it is important that scholars, practitioners, and environments at large are contributing beneficially to that relationship.

It is also important to note that there are different types of engagement. Therefore, it is possible that certain types lend themselves more to success than others do. Hu (2011) found that social engagement has a different effect from academic engagement; furthermore, the combination of the two has yet another effect on student success (specifically, persistence). Increased academic engagement without increased social engagement is negatively related to persistence. Students who are primarily academically engaged persist at a rate of 62.8%, whereas students with low social and academic engagement persist at 59.3%. On the other hand, high social engagement is positively related to persistence.

These results lead one to believe that scholars and student affairs professionals need to look at engagement in terms of categories, rather than as one solid concept. However, this distinction between types of engagement is problematic in discussions around living-learning programs and residential colleges, which attempt to blur the lines between the two. One of the foundational concepts of these communities is that learning takes place outside the classroom, and that a holistic approach necessitates pursuing both academic and social engagement. Hu's study may be more relevant to university life in general than it is to learning communities.

Another interesting distinction between types of involvement (in this case very similar to engagement) is Robert Putnam's (2000) use of the Yiddish terms *machers* and *schmoozers*. *Machers* are those who invest their time heavily in formal organizations in the community. *Schmoozers* are those who spend their time in informal conversation and

fellowship. These categories are not mutually exclusive, and both are socially active groups. Furthermore, students fall into both of these categories, and it is likely that both types are present in Brooks Residential College.

Regarding the motivational aspect of engagement, Deci and Ryan (2002) explore the components that make up motivation, differentiating between intrinsic and extrinsic motivation. A student would be intrinsically motivated if he or she “engaged in an activity freely without being rewarded” (p.10), simply because he or she enjoyed that activity. With the addition of a tangible reward, intrinsic motivation decreases; the reward becomes expected. However, intangible rewards, such as encouragement, increase intrinsic motivation. Similarly to how Lewin posits that behavior is an outcome of person and environment, Deci and Ryan explain that others can influence an individual’s motivation level; an environment includes the people with whom an individual interacts. Motivation is an integral aspect of self-determination – an individual’s attempt to develop a coherent sense of self. Self-determination theory encompasses several sub-theories (cognitive evaluation, organismic integration, causality orientations, and basic needs), and posits that people have three psychological needs: competence, autonomy, and relatedness. Competence is the effectiveness of one’s efforts, autonomy is the freedom to self-organize one’s experience, and relatedness is the “desire to feel connected to others” (p.231). Deci and Ryan (2000) define needs as “innate psychological nutriment that are essential for ongoing psychological growth, integrity, and well-being” (p.229). An individual will most likely not function effectively if these three needs are unmet. Therefore, these needs drive an individual’s pursuit of goals. After meeting their psychological needs, individuals will then tend to change their

behavior to pursue those things they find interesting, thereby acting on intrinsic motivation.

The concept of basic human needs is not new. Simone Weil (1952) presents an in-depth commentary on the needs of the soul, which are more enduring than and superior to rights. She expounds on the following: order, liberty, obedience, responsibility, equality, hierarchism, honor, punishment, freedom of opinion, security, risk, private property, collective property, and truth. After these, however, Weil devotes the majority of her book to the concept of “uprootedness,” noting that “to be rooted is perhaps the most important and least recognized need of the human soul” (p. 43). One can connect many of these concepts to Deci and Ryan’s work. I will return to the idea of being rooted, or belonging somewhere, later in this chapter.

Why Engagement is Important

The concept of engagement is not yet firmly concrete; there are limitations in scholars’ understanding of it. As Hatch (2012) says, it is a black box that is still not fully investigated or understood. However, there remains a need to study and understand engagement, as finite and mutable as our current understanding may be. This section explores some reasons as to why engagement matters.

Hurtado (2007) argues that engagement is a means rather than an end. There are benefits and goals of engagement far past the condition itself, especially in relation to the ideals of higher education. Student affairs professionals should not pursue engagement for its own sake; it is related to numerous outcomes.

Tinto makes clear the connection between involvement and quality of student effort. Since the two are positively correlated, when one increases, so does the other.

Similarly, involvement has an impact on persistence (Milem & Berger, 1997). Milem and Berger found that early involvement is more likely to ensure continued engagement, making it an adequate predictor for future involvement.

Going beyond educational outcomes, Hu and Wolniak (2009) found that social engagement was also related to higher early career earnings. This being the case, it is reasonable to create programming and structures that guide students toward purposeful engagement, which will provide them with access to social capital and an integrated experience. An important factor in this correlation, however, is that social engagement, as well as earnings, relate closely to a student's field of study. Finally, social engagement is linked with students' overall satisfaction with their college experience (Bean, 1983).

What Impacts Engagement

Institutional Aspects

Institutional allocation of resources can have an impact on student outcomes (Gansemer-Topf, Saunders, Schuh, & Shelley, 2004). Gansemer-Topf et al. found that DEEP classified public and private baccalaureate colleges spent more money per student than their non-DEEP peer institutions, which could suggest that these institutions are investing more resources in student experiences in order to engage them. On the other hand, DEEP public doctoral and master's institutions did not spend more than their peers, yet maintained a higher level of student engagement. That said, the influence of institutional spending is not clear, but remains an interesting potential variable in students' experiences.

One institutional offering that seems to positively impact engagement is living-learning programs. Research reflects the reality that student success increases as a result of participation in a learning community, living-learning program, or some variation thereof. I will explain these concepts later in this chapter.

Student Characteristics

Pascarella's (1985) General Model for Assessing Change explains that five variables accumulate to impact student learning and development, the first being students' pre-college characteristics, which, combined with the institution's organizational structure, shape the environment. These three together (pre-college characteristics, organizational structure, and environment) fashion the students' interactions with "agents of socialization," such as professors and colleagues. Finally, these first four impact the last variable, which is the quality of student effort. Student effort plays a role in involvement and engagement; therefore, a variable in student engagement is the characteristics students bring with them to college. Astin developed the I-E-O (inputs-environment-outcomes) model in 1993, emphasizing that what students bring to the environment (inputs) heavily impacts their interaction with their environment, and therefore also influences the outcomes of that interaction (Astin, 1993).

Gender may impact engagement as well; scholars tend to find that females are more likely to become involved and to view the college environment positively (Pike, Kuh, & Gonyea, 2003; Pike & Kuh, 2005). Another attribute that makes a difference is whether a student is a first- or second-generation college student (Pike & Kuh, 2005). Studies show that first-generation students are less likely to engage in habits and activities typical of engaged students, such as living on campus, having relationships with

faculty and students, and participation in student organizations. Overall, first-generation students are less likely to perceive a supportive college environment.

Students' educational origins matter also. Roberts and McNeese (2010) found that students who began at an institution as first-year students had the highest level of engagement, whereas students who had transferred from a junior or community college had lower engagement, and students transferring from a four year college exhibited the lowest levels of engagement.

Finally, Arboleda, Wang, Shelley, and Whalen (2003) found that attitudinal variables explain 29% of the variation in residence hall involvement, and background variables explain 5.1% of involvement. The attitudinal variables in this study had to do with satisfaction with resident student leaders, connection with the hall director, academic comfort and progress, the social environment, and study habits. Because these variables impact involvement so highly, they are worthy of consideration.

How Engagement Relates to Community

Learning Communities

Many colleges have adopted a particular type of student community structure, often calling it a "learning community." While these take on different forms at various colleges, they typically involve enrolling the students with the same interests or majors in multiple courses together, perhaps even drawing links between courses to supply a more integrated learning opportunity. These communities are focused on a common academic experience shared among a diverse group of students. Learning communities have been shown to increase the level of students' academic engagement. Furthermore, students in

learning communities reported greater satisfaction with their college experience (Zhao & Kuh, 2004). All in all, learning communities tend to have a high impact on student success, indirectly affecting learning through engagement (Pike, Kuh, & McCormick, 2011). The majority of evidence in the literature demonstrates that “the best learning occurs when the curriculum and cocurriculum are intentionally united” (Shushok, Henry, Blalock, & Sriram, 2009, p. 11).

Belonging to a Community

While there is something to be said for learning as a group, simply belonging to a group is also important for students. Nearly 15 years ago, Nancy Schlossberg (1989) provided a language for understanding community building, particularly the terms “marginality” and “mattering.” These terms relate to the key issue of belonging, a concept that has to do with a person’s feelings of being in the right place. Marginality is the lack of that sense of belonging; students may feel marginalized when they do not feel accepted or fully “in” with a group. This feeling can be temporary or stable, depending on an individual’s circumstances and personality. Students joining a community can expect some time to pass before they begin to feel like an important member. When they do begin to feel that they belong, students experience mattering – the sense a student has that someone else is interested in and concerned about him or her. Mattering is a sense of personal significance. This feeling of significance is important, because it encourages students to become and stay engaged; therefore, a student who feels he or she matters to a community will stay with that group and even be willing to contribute more to it. Communities play a role in this phenomenon: “The creation of environments that clearly

indicate to all students that they matter will urge them to greater involvement”
(Schlossberg, 1989, p. 15).

Arboleda et al. (2003) found other benefits of cultivating a sense of belonging in students. One is that, because there is a link between intellectual development, social activity, and sense of belonging, students who feel they belong are more involved and therefore experience higher academic success. I have already explored the idea of academic benefits of engagement, but it is important to note that a sense of belonging may often precede involvement. Arboleda et al. also found that there is a cycle of involvement and satisfaction; one increases the other so that a sustainable pattern emerges. This cycle is important in a community of students’ increasing satisfaction and increasing involvement. It may be necessary here to re-clarify involvement and engagement. It seems that a sense of mattering and satisfaction encourages students to put forth physical and psychological effort to contribute to their community; this effort is involvement. Engagement, as explored above, is very similar. However, depth of experience is a distinct aspect of engagement, one which develops alongside involvement. It is likely that, with the cycle of satisfaction and involvement, and with a sense of belonging, student experiences in the community will become deeper and thereby lead to increased engagement.

Community is “the binding together of individuals toward a common cause or experience” (Lloyd-Jones, 1989). This definition is not limited strictly to learning communities, although they do demonstrate a common pursuit. Because students (like most humans) need something to which to belong, the presence of a veritable community is necessary; true communities have the tendency – and charge – to impart a shared sense

of purpose to individuals (McDonald, 2002). For reasons explored above, a student's sense of community – and his or her belonging to it – can provide a significant part of the picture of engagement (having to do with depth of experience more than simply time or effort given). Weil (1952) offers insight for the argument that belonging is vital. She posits that what “roots” an individual is his or her “participation in the life of a community which preserves in living shape certain particular treasures of the past and certain particular expectations for the future” (p. 43). Membership, then, is an essential quality of being rooted and meets a basic human need.

Putnam (2000) makes a case for the importance of community, his scope being the American population. He tracks the decline of not only Americans participating in formal organizations, such as politics and community associations, but in informal gatherings and activities, such as coffee shops and sending letters. Putnam also notes a decrease in social activity in general. For example, fewer people play sports, but many more watch sports and pay more money to do so than in the past. There exists a greater tendency for individuals to be spectators rather than participants. Additionally, Putnam raises the question of whether suburbanization is responsible in part for disengagement. Suburbanization has enabled people to separate their workplaces from their residences, and eventually to self-segregate into homogeneous “lifestyle enclaves.”

This phenomenon bears a similarity to college campuses, which, depending on the institution type and size, encounter a tension between administrators encouraging students to live on campus and students desiring to live in off-campus apartments. One could compare off-campus living to suburbanization; students are physically removed from their “workplaces” (their academic base) and from the center of university activity.

In light of Putnam's observations, campus-based learning communities, such as the residential college which is the focus of this study, may equip students to fight against the tide of disconnectedness that is becoming the trend in American society.

Cheng (2004) furnishes some confounding evidence regarding engagement and community. He found that participating in extracurricular activities did not significantly contribute to students' sense of campus community. These findings shed light on the issue of the original definition of involvement; it is not enough to merely participate if the goal is engagement. However, Cheng does not look at smaller communities such as a residence halls or learning communities, and examining the sense of community in these groups would be beneficial. Cheng did find that being valued and accepted (mattering) played a vital role in students' sense of belonging to the community. Furthermore, students' sense of marginality (Cheng describes it as loneliness) leads to a lack of a sense of community. Finally, a student's social life impacts his or her sense of community on campus. This aspect of community building includes close friends as well as quality programming and opportunities. Residential experiences are also impactful: "Students considered residence halls the place where academic, social, and cultural aspects of their college life could be integrated, with a sense of community ensued" (p. 229). These results corroborate earlier studies' (Kuh et al., 2005; Chickering & Gamson, 1987) division of responsibility for engagement between the students and the institution.

Living-Learning Centers/Programs

One type of learning community also includes the students living in proximity to one another, often called a *living-learning community/center* or *residential learning community*. These communities add social interaction to the structure, and can help

students achieve higher involvement (or engagement) and persistence rates, as well as academic outcomes such as reading comprehension and critical reasoning (Zhao & Kuh, 2004). Furthermore, if a faculty member lives or interacts closely with students, these ongoing interactions can support community building as well (Ellet & Schmidt, 2011). For these interactions to be particularly meaningful, they need to be consistent and involve faculty-resident dialogue and shared reflection. It is also crucial that student affairs staff and faculty work as a team, using a collaborative approach to their work. The kind of community that can come about through a residential program that includes a faculty-in-residence or faculty affiliate or partner is different from a typical classroom community. There is a catalyzing aspect to living in close proximity, which leads to stronger connections between students and faculty. Shushok et al. (2009) support these claims, asserting that faculty and student affairs staff complement each other's work in residential communities. Furthermore, through interacting outside of the classroom, "students learn to see faculty members as more than classroom figures," and faculty "learn more about students as individuals" (p. 13). Both faculty and students benefit from living-learning programs by learning with and from one another.

Inkelas and Weisman (2003) found that students in living-learning programs demonstrate "higher levels of engagement in college activities with stronger academic outcomes" (p. 335). Moreover, "Students who live in residence halls in which involvement in out-of-class activities is higher (as in living-learning centers) experience greater cognitive gains than do those living in conventional housing" (Arboleda et al., 2003, p. 518). There is a body of research demonstrating that community involvement and belonging is important for students. Living-learning programs provide a model of

how to live in a community that can cultivate in students a habit of giving back to their own community – a practice that can remain with a student into his or her post-college life.

Residential Colleges

Zeller, James, and Klippenstein (2002) and Levine, Laufgraben, and Shapiro (2004) developed typologies of living-learning communities, each including residential colleges in their list. On his website, “The Collegiate Way,” which is dedicated to providing an understanding of this type of community, Robert O’Hara describes residential colleges as “permanent, cross-sectional, faculty-led societies that provide the advantages of a small college in the environment of a large university” (“Residential Colleges and the Renewal of Campus Life”). He traces the history of the residential college concept from its origins in medieval England to its transplantation to the United States with the genesis of the colonies to the current worldwide situation. The Enlightenment and secularization contributed to the deconstruction of the residential college for a time, as new knowledge and industrialization created a desire in America for a more practical curriculum. With the growing dislike of the old curriculum came a trend away from the concept of residential community life. Rather, institutions began to adopt the German model of the university, which focused on research rather than liberal arts and a “unitary view of knowledge.” In addition, following the Civil War and the Morrill Land Grant Act of 1862, public universities and land grant colleges proliferated and championed a utilitarian, vocational curriculum. With the continued expansion of these practices, higher education in America essentially rid itself of the remnants of classical

learning. However, beginning in the 1920s, a re-awakening to the collegiate ideal started to take root, and has continued to flourish through today (Ryan, 2001).

In the college's medieval form, it was understood that "teaching and learning are social endeavors, naturally pursued in a community of teachers and students" (Ryan, 2001, p. 47). This ancient way of integrating education and life is becoming more prominent at many institutions in the United States and around the world. The use of the word "college" in these instances is beginning to return to its old connotation as a partnership, organized social group, or residential grouping, rather than the institutional, impersonal connotation of the "university" (Ryan, 2001).

O'Hara posits that the smaller size and decentralized nature of residential colleges mediate the impersonal effects of "educational massification." They provide the communities to which students belong, meeting the psychological needs of relatedness (Deci & Ryan) and mattering (Schlossberg). The membership of a residential college consists of students and faculty from any number of academic disciplines and classifications (O'Hara). There is a focus on a student's full development, including life outside of instruction (Ryan, 2001).

Residential colleges in the United States also represent a return to the concept of faculty leadership on campus beyond the classroom. Faculty understand education and are able to facilitate it outside the classroom (even in residence halls), whereas many administrators and student affairs professionals tend to divorce campus life from academics, neglecting to create meaningful educational environments. O'Hara sees great potential for collaboration and for rich, integrated living-learning environments when faculty are directly involved in campus life.

Residential colleges provide stable community life and teach students that they are part of a meaningful history much larger than their own. They also cultivate a sense of diversity deeper than that of race by calling together students of all disciplines. O'Hara regrets the current trend to create "theme halls" where the students of one discipline live together. He claims that this kind of community does not provide true education because those involved are more likely to be of similar opinions and ways of understanding the world.

Jessup-Anger (2012) explored the effect of living in a residential college on students' inclination to inquire and on their pursuit of and capacity for lifelong learning. To do this study holistically, she controlled for student characteristics and motivation, as well as the residential college environment. She notes that residential colleges serve as a way for large institutions to pursue liberal arts ideals such as high quality instruction, intellectual development, democratic ideals, and dedication to learning. These ideals further help to fulfill the basic psychological needs of competence and autonomy (Deci & Ryan, 2000).

Jessup-Anger found variations between environments – a reason to use caution when attempting to apply attributes and groupings to students from multiple residential colleges. Of more importance are student characteristics, especially if students with similar characteristics tend to cluster in particular environments. She found that motivation, college experience, and degree aspiration could explain much of the variation in the dependent variables of inclination to inquire and capacity for lifelong learning. She also notes that even large research universities, by cultivating smaller communities like residential colleges, can provide a liberal arts environment for students. Two

necessary components of such a community are a challenging academic atmosphere and meaningful interactions with faculty outside of class. Furthermore, because motivation plays a role in the inclination to inquire and to pursue lifelong learning, and because motivation, through self-determination theory, is linked with the need for competence, autonomy, and relatedness, it seems that student engagement is also connected, if not integral, to this study's two outcomes of inclination to inquire and capacity for lifelong learning.

Points Systems

Of the more than 100 residential colleges in the United States, a number (such as those mentioned below) employ some variant of a points system, which tracks attendance at community events, participation in leadership roles, and other forms of involvement. A points system is 1) a measure of the physical involvement of students (which activities they take part in) and 2) a potentially motivating factor for involvement. Most residential colleges use this information to determine housing spaces for the following year. For example, Shepard College leadership at Northwestern University requires residents to earn 20 points at the end of their winter quarter in order to maintain residency. Those who are not members and wish to join may do so by earning points, as a way of proving themselves worthy. In most of these communities, their points records are connected to housing privileges. Students who wish to stay in the community, therefore, must participate at a minimum level, thereby increasing their involvement ("Shepard Policies"). In this kind of system, students who choose to earn enough points to remain have most likely established a sense of belonging to the community; those who do not earn adequate points may not identify as strongly with the community and lack a vested

interest in staying. New York University's residential college system is just four years old and has two colleges thus far. Students' ability to remain in a college and to choose their desired room is once again dependent, at least partially, on their past community engagement ("Broome Room Selection").

There are several potential pros and cons to a points system. Students may only participate in events to earn the minimum number of points necessary because they simply wish to continue living in the physical space. Having a system solely focused on housing privileges as the prize 1) relieves from responsibility those students who do not wish to return and 2) limits participation to being externally motivated. For students who are not concerned about where they live or which room they occupy, extrinsic rewards will not be enough to engage them. On the other hand, it is possible that students who only wish to earn housing privileges will experience increased engagement as a by-product of their participation. At the very least, students will be present and interact with community members. If college leadership takes advantage of those instances to communicate a higher purpose and create a learning opportunity, there is even greater chance for engagement. A points system can extrinsically motivate those who do care strongly about housing for its own sake. It is unclear whether such a system can effectively benefit intrinsic motivation or if it merely reflects it numerically.

The present study examines Brooks Residential College at Baylor University, a residential college that began utilizing the points system primarily as an accountability tool, but has since reshaped it into a college-wide competition. Originally, students needed to meet the minimum of 50 points per semester to "remain in good standing." Individual students and floors (each floor is a team) had the opportunity to win various

prizes based on point totals. As it now stands, the competition now unites individuals on each floor into teams, all vying for a grand prize by way of highest participation. I conducted my study between the two phases.

The Need for a Study

While physical involvement – a student’s presence at an event, for example – may gradually lead a student to engagement, that student may also simply hope to earn enough points to avoid disappointing the college leadership. Regardless, there remains no literature on engagement in residential colleges, especially having to do with a point system. Furthermore, much research done on correlations between engagement and living-learning communities has to do with broad, institutional engagement, rather than engagement in the residential community itself. The reason I choose the term “engagement” rather than “involvement” is that I hope to discover ways in which the residential college itself may create an environment, as well as opportunities, for deep experiences and student success (Wolf-Wendel et al., 2009).

Students who choose to engage do so for a variety of reasons. Students at Brooks College may participate because they thoroughly enjoy being a member of the college community; on the other hand, they may attend events simply to earn points. Perhaps a student becomes engaged after developing a sense of belonging. On the other hand, perhaps a student feels a sense of belonging due to being engaged. There are other possible scenarios, each leaning toward either intrinsic or extrinsic motivation. It is necessary to learn why students engage (if certain characteristics can predict engagement), as well as what they do and what they perceive about it. The next chapter explains how I will conduct this study.

CHAPTER THREE

Methodology

It is clear that there is more to discover about engagement. In this study I focused on social engagement, particularly the concepts of belonging and motivation, but in doing so I included inquiries about students' relationships with faculty, noting that social and academic life are not mutually exclusive.

Research Design

The question I hoped to answer in this study is: How do gender, major, classification, and points predict engagement? To answer this, I conducted a quantitative study, whereby I used survey data in a multiple regression statistical analysis to analyze correlations between the independent and dependent variables.

I surveyed students who currently live in Brooks College. This survey took a cross-section of the community in the present time, in order to shed light on the trend of attitudes and behaviors of the group. I chose a survey method because it could provide data for a large number of people in a relatively short amount of time. Students received a questionnaire in an email and were able to complete it on their own time and submit it online.

Data Collection

More than 360 students live in Brooks College. I worked with the college staff to email the survey to students, each receiving his or her own link to the online questionnaire. In this case, because there was a clearly defined number in the population,

this was also my sample. The selection process was random; each individual had the same chance of being selected. The responses should therefore be generalizable to the whole population. I hoped to receive data for at least 150 students.

With regards to points, I received that information from Brooks College staff and matched students' responses with their points totals, rather than relying on students' reports of their own points. Self-reports are acceptable if students know how to answer, if they understand what a question is asking them, if the question causes them to think, if a student reports on very recent activities, and lastly, if answering the questions will not jeopardize the wellbeing of the student respondents (Porter, 2011). However, having no guarantee that students would remember their behaviors throughout the entire past semester, I elected to avoid such questions.

Variables and Scale

The literature points to numerous variables related to engagement. For this study, however, I chose to limit the variables to only a few. I developed the scale questions (see Appendix) primarily based on the literature reviewed in Chapter Two.

Independent Variables

My independent variables were field of study, gender, classification, and points. Hu and Wolniak (2010) note that field of study is important for engagement; therefore, one independent variable was students' major. Pike, Kuh, and Gonyea (2003) found that females were more involved and had positive perceptions of the environment; I was curious to see whether this is true at Brooks College. Pike, Kuh, and McCormick (2011) found that there is a slightly stronger correlation between engagement and learning

community participation for seniors than for freshman. I hoped to learn about the differences between classifications of students who live at Brooks. Arboleda et al. (2003) found that particular behaviors were connected to residence hall involvement, including: attending hall programs, interacting informally with members, and studying with members. The points data I collected provided information on whether students have been attending hall activities; the other factors I included in a few additional survey questions. Zhao (2004) posits that “linking participation in learning communities with institutional records about student academic progress and other college experiences could yield promising insights into how to more effectively structure other aspects of the college program for certain groups of students” (p.20). For Brooks College, the points records served as the same sort of measure as grades in terms of representing the completion of specific tasks.

Dependent Variables

My dependent variable was student engagement, which involves a deeper experience and psychological investment. I divided this variable into two components: sense of belonging and motivation. The sense of belonging scale has two parts: student perception of the Brooks environment and Schlossberg’s concept of mattering.

Sense of belonging. Pike and Kuh (2005) noted that if a student perceived the Brooks College environment as positive, it would lead to greater engagement – and vice versa. Therefore, I asked questions about how students perceive the Brooks environment. Cheng (2004) found that students look for certain elements of a community: an open environment where individuality is respected, faculty and students engaging in teaching

and learning, an active social and learning environment in residence halls, positive relationships between different cultural groups, a celebration of institutional heritage, and assistance to students who are lonely or depressed. I wrote some questions based on these aspects. Pike, Kuh, and McCormick (2011) also found that student perception of a support environment was positively related to participation in that community, especially for seniors. Since feeling supported closely related to Schlossberg's (1989) ideas of mattering and marginality, I included questions pertaining to acceptance, support, and belonging.

Motivation. Jessup-Anger (2012) notes that motivation was one of the predictor variables for tendency to inquire and to pursue lifelong learning; I believe it is also a factor for social engagement because it, like sense of belonging, deals with comfort in and ownership of students' experiences and environments. Astin (1984) posits that to focus on student involvement means to pay attention to a student's level of motivation, how much time or energy he or she devotes to the learning process (or in this case, residential college community), and how much he or she identifies with the environment in terms of values. Jessup-Anger (2012) incorporates two aspects of motivation: 1) students' belief about whether they can perform a task (expectancy), and 2) students' belief about whether something is worthwhile. I used these various concepts to create questions that relate to motivation.

What is left out. I did not attempt to use questions similar to the NSSE because that survey has more to do with academic habits and objectives, rather than a social or community focus. Furthermore, as I noted above, I avoided relying on students to report

their participation in Brooks activities over the semester due to issues with self-reported data. The primary challenge to validity of self-reports in this study is that I would have needed to ask students to reflect on an entire semester; people are less likely to report accurately on their activities if they are not recent. Milem and Berger (1997) recommend directly observing behaviors to learn more about the nature of involvement; points data is a modification of direct observation.

Porter (2011) delineates the above and other validity issues with NSSE. He says that if the researcher expects strong correlations, even generally high correlations could be considered not strong enough, whereas if the researcher expects to see no correlation, even a modest correlation would be surprising and could be considered strong.

With this in mind, it is necessary to state here what I expected to find in this study, so that in my analysis I can determine whether the correlations are strong or weak relative to my expectations. Because of the links between participation and engagement, I expected to find that high points generally correlate to high engagement; however, I also thought there might be outliers who participate physically yet are not engaged.

Validity

Much of the validity efforts for this study have to do with conclusion validity, which is based on arguments and evidence. I took former studies into account, as well as critiques of certain ways of surveying, and created a scale based upon which questions would elicit the right kind of information. The survey in this study stems from the Classical Measurement Model of scale development (DeVellis, 2012). I made my survey questions clear so that students would understand what they mean without the need for (and danger of) individual interpretation. In terms of criterion validity, I did not take any

scale items directly from other studies, partly because I chose to use points data in place of behavioral questions, and partly because many questions I ask I have not found elsewhere. Finally, I did not run an exploratory factor analysis to check for construct validity; however, in a future study that would be an excellent undertaking.

CHAPTER FOUR

Results

The data I collected in this study was intended to shed light on the question: How do gender, major, classification, and points predict engagement? This data consisted of student point totals, as well as total number of events attended and student survey responses. Matching student points with their responses provided information on students' attitudes and behaviors. The initial response total was 125, giving me a response rate of approximately 34.7%. However, after eliminating outliers and cases with missing data, the multiple regression used 84 cases for the analysis.

Data Screening Process

In order to incorporate categorical variables in the multiple regression, the survey items requesting demographic information (classification, year in Brooks College, floor in Brooks, major, and ethnicity) were recoded as dummy variables. Using one instance of each variable as a baseline, I created variables from the other instances in order to compare them to that baseline. For example, with the data on student classification (freshman through senior), I created three dummy variables (sophomore, junior, and senior), the results of which I compared to freshmen (the baseline). The other variable baselines were, respectively, first floor in Brooks, majors in the College of Arts and Sciences (excluding the natural sciences in order to distinguish them from the humanities), males, and those identifying as Caucasian. I chose freshmen, Arts and Sciences majors, and Caucasian students as baselines because each of these variables had

the greatest number of students out of the sample that took the survey. I chose the first floor as a baseline because I postulated that these students face the fewest physical obstacles when it comes to attending Brooks events.

Although I had data for how long each student has lived in Brooks College, these answers were too closely related to classification; I therefore left students' year(s) in Brooks out of my analysis. Furthermore, I did not use majors in my final analysis because there was such variety that each group of majors was too small to be considered. Finally, I also chose to limit the number of independent variables to five because of general rules about the ratio of number of cases to number of IVs. One such rule is to have 15 times as many cases as variables. Another is $n \geq 50 + 8k$ (where k is the number of IVs). With five variables, my study initially only met the requirements of the first rule. However, because, as explained below, I eliminated the ethnicity variable, my sample size complied with both rules.

Reliability

After transforming variables and clearing outliers, I conducted a reliability analysis to determine the quality of my scale. This analysis is necessary because it denotes the degree to which the scale truly measures student engagement (consisting of the subscales for belonging and motivation). The Cronbach's alpha for this scale was .982, which means that it measures engagement very accurately. Because the scale was reliable, I used it to compute engagement as a new variable to include in the multiple regression.

Regression

I ran a standard multiple regression using the engagement score as the dependent variable. The independent variables were: total points, classification, gender, floor in Brooks, and ethnicity. In this type of multiple regression, using the Enter method, all of the independent variables are entered into the analysis at the same time. Each independent variable is tested as though it were entered after the others. The test assesses each independent variable's impact on the dependent variable, as well as what it adds to the prediction of the dependent variable (Mertler and Vannatta, 2010). The multiple regression shows the nature of the relationship between the independent and dependent variables.

The multiple regression presented to me five models, all significant. Every subsequent model entered an additional independent variable. The fifth model added ethnicity to the regression, but because as a variable it was insignificant, I chose to use the fourth model. The table below (Table 1) displays the means, standard deviations, and correlations for the variables.

Table 1
Means, Standard Deviations, and Intercorrelations for Student Engagement Predictor Variables

Variable	Mean	SD	SES	1	2a	2b	2c	3	4a	4b	4c	5
Student Engagement Score (SES)	194.1786	39.37682	1.000	.517	-.308	.135	.146	-.074	.174	.258	-.197	.058
Total points	19.01	12.760	.517	1.000	-.135	-.008	.047	.035	.030	.100	-.211	.058
Classification												
Sophomore	.31	.465	-.308	-.135	1.000	-.286	-.186	.224	-.089	-.180	.051	.047
Junior	.15	.364	.135	-.008	-.286	1.000	-.119	-.041	.113	-.041	.033	.194
Senior	.07	.259	.146	.047	-.186	-.119	1.000	-.170	-.053	.037	.037	-.025
Males	.27	.449	-.074	.035	.224	-.041	-.170	1.000	.200	-.078	-.018	.089
Brooks Floor												
Second	.25	.436	.174	.030	-.089	.133	-.053	.200	1.000	-.355	-.355	-.017
Third	.27	.449	.258	.100	-.180	-.041	.037	-.078	-.355	1.000	-.377	-.243
Fourth	.27	.449	-.197	-.211	.051	.033	.037	-.018	-.355	-.377	1.000	.222

At least 15 students (out of the final 105, after data screening) declined to answer each ethnographic question, which decreased the total amount of cases available for analysis. This phenomenon also explains why the following percentages do not add to equal 100%. Males represented 24.8% of the sample, and 61% were female. 41 respondents were freshmen (39%), 28 were sophomores (26.7%), 14 were juniors (13.3%), and seven were seniors (6.7%). Sixteen students lived on the first floor (15.2%), 23 lived on the second floor (21.9%), 23 lived on the third floor (21.9%), and 27 lived on the fourth floor (25.7%). Sixty-seven respondents identified as Caucasian (63.8%), while 23 identified with an ethnic minority (21.9%).

Tolerance relays the proportion of variance in an IV that is not explained by its relationship with other IVs; therefore, the higher the tolerance, the better. All tolerance statistics far exceeded .1 (the lowest acceptable limit), which means that the independent variables are different enough from one another to be legitimate as separate variables. The chosen model's *R* squared was .440, with an adjusted *R* squared of .381. Therefore, this model accounts for 38.1% of the variance in student engagement scores. The *F* test shows that *F* for this model was 7.378, which is the degree to which the model predicts student engagement. *F* should be at least larger than 1 for the relationship between independent and dependent variables to be meaningful. Furthermore, because the *F* test significance is $p < .000$, the relationship between student engagement and the IVs is linear; this linear relationship indicates that the model does indeed predict the DV (engagement).

In the chosen model, only total points and floor are significant variables, because their *p* values were less than .05. Classification and gender are not significant, and

ethnicity in Model Five was insignificant as well. Beta for total points in Model Four was .492, meaning that when total points increases by one standard deviation unit, student engagement changes by nearly one half of a standard deviation unit. Beta for the second floor variable was .360, which indicates that, in comparison with living on the first floor, living on the second floor increases student engagement by over one third of a standard deviation unit. Finally, beta for the third floor was .379; therefore, living on the third floor in comparison with the first floor increases student engagement by 37.9% of a standard deviation unit. This information is presented in Table 2.

Table 2
Regression Analysis Summary for Student Characteristics Predicting Engagement

Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>	Sig.
Total points	1.519	.277	.492	5.486	.000
Classification: Sophomore	-7.409	8.439	-.088	-.878	.383
Classification: Junior	9.123	10.035	.084	.909	.366
Classification: Senior	15.236	13.738	.100	1.109	.271
Males	-7.949	8.140	-.091	-.977	.332
Second Floor	32.559	10.785	.360	3.019	.003
Third Floor	33.239	10.344	.379	3.213	.002
Fourth Floor	15.297	10.317	.174	1.483	.142

Limitations

With 90 or fewer cases being usable for analysis, IV options were limited. If the number of respondents had been greater, I could have employed more IVs; furthermore, I may have been able to use information on majors because there would have been stronger groupings of areas of study. Even so, the data yielded from this study provides a foundation from which to proceed regarding certain predictors of student engagement.

CHAPTER FIVE

Discussion

The results of this study begin to fill the gap of knowledge that exists in the literature concerning a theoretical foundation for points systems. It is encouraging that, with two variables in Model Four being significant, this model can explain nearly 40% of the variance in student engagement at Brooks College. The following is a discussion about the two variables: the total number of points students earn and the floors on which students reside.

Implications for Theory

The findings from this study demonstrate the relationship between certain student characteristics and student engagement in Brooks Residential College. While clear correlations exist, however, causes are not necessarily apparent. There is a high, positive correlation between total points and engagement scores. This means that points can *predict* engagement, but it does not also follow that points directly *result* in higher engagement. Points are a representation of students' behavior – namely, attending events.

One way to interpret the points-engagement correlation is to say that the more a student participates in community events, the higher his or her engagement will be. This reasoning accounts for a substantial part of the motivation behind creating the points system at Brooks College. It was hoped that the system would provide students with incentive to participate. Students would, by attending events – which doubtless includes

meeting other residents, building on current connections, and any number of other positive behaviors – nurture their sense of belonging. They *feel* a part of it simply by *being* a part of it. This, in turn, would motivate them to contribute to the community.

A second way to interpret the correlation is to say that the students who participate most do so because they are already engaged. That is, they already feel a sense of belonging to the community and are motivated to contribute to it. In this case, it is more difficult to know what must be done to improve the engagement of un-engaged students. In the previous interpretation, the answer is provided: students will become engaged by being present. In this interpretation, there is still the problem of how to motivate students to be present at all. In other words, how might the community contribute to a student's engagement so that he or she might then join community activities?

The other significant predictor in Model Four was floor level. When a student lives on the second or third floor, his or her engagement score is higher than if he or she lived on the first floor. Fourth floor results were insignificant in this study. This could mean that second and third floor students have a higher chance of being engaged. It could also mean that students who are more engaged tend to choose to live on these floors. However, since nearly half of the population are freshmen who do not choose their rooms, and since upper division students are encouraged to remain with their floor when choosing housing, it seems far more likely that the former interpretation is true. If so, it is possible that some attribute about these floor cultures is significantly effective in increasing engagement.

These cultures could have many influences, including the student leaders on each floor and hall, the current students who live there, and the inherited culture of the group. It is possible that the results for each floor could change from year to year, and some fluctuation would be unsurprising. On the other hand, if the prevailing factor has to do with some abiding culture or tradition, change would be less likely. It seems most possible that there are community leaders (resident assistants, also known as CLs) who have worked hard to create traditions and identities for their floors, and that these traditions and identities have been carried by subsequent CLs. There is something to be said for consistency of practice, and it seems that when a student has an identity to which to belong, one even more local than the residential college, that student will find a powerful sense of belonging.

Other possibilities include the fact that many students on the first floor are seniors, whose efforts are increasingly directed toward life beyond the college and the university. Finally, the first floor population is the smallest among the floors. Perhaps it is more difficult to feel a sense of ownership for the space when there are fewer people and when the floor plan is such that all residents using the elevators walk through a portion of the first floor hallways. There is much room here for further investigation.

An important aim of this study was to determine whether points are a valid measure of engagement, or whether a points system is worth maintaining. I posit that while points clearly correlate with high engagement, and are for the most part an accurate measurement of engagement, there are some exceptions. First, a student in a residential college may participate in events because of negative peer pressure or out of fear of losing housing opportunities. While this type of student did not stand out in the data, that

may be because this type of student is less likely to take a survey (unless he or she were to suffer some loss by not taking it).

The other primary exception is also about students who may not have taken the survey, but who would probably have lower points scores. There are students who do not wish to take part in organized activities, including surveys, but who find great satisfaction in informal settings, spontaneous events, and personal relationships. These students may well feel – and act – like engaged community members. It is fathomable that a student could answer positively to many of the survey questions, such as those concerning feeling accepted, feeling purposeful, and feeling comfortable, without attending numerous major community events.

This study, however, reflects only the situations of students who did take the survey, and then makes inferences to the student population as a whole. According to this data, points can predict engagement levels. It is reasonable to make cautious assumptions about a student's engagement based on his or her points, particularly because points are not self-reported. A student with higher points is more likely to be engaged – to feel that he or she belongs to and should care for the community. Likewise, a student with lower points is more likely to be less engaged. However, there are many possible reasons for low student participation. It could be that the student's schedule is inconveniently but unavoidably conflicting with Brooks events. It could be that the student is struggling with a personal issue. It could be that he or she feels alienated or uncomfortable in the community. In the latter case, the student would undoubtedly be less engaged as well. Yet while engagement can be reflected in points, there may be a minimum sense of engagement necessary in order for students to participate.

It is necessary to consider that points measure what a student *does*, not necessarily what he or she *feels* or *thinks*. However, what people do reflects more of what they believe than what they say they believe. That said, someone who *alleges* that he or she values contributing to the community is dishonest, or is at least lacking integrity, unless he or she *does* contribute. Points can measure that contribution and commitment. Therefore, they can reveal students' physical engagement. Points cannot explicitly speak to the psychological aspect of engagement. However, because points and psychological engagement closely relate, it is reasonable to expect that, in most cases, behavior in the form of physical engagement reflects the internal side of engagement.

Even so, points should not be the only measurement taken to determine the quality of a student's membership in the community. More than half the variance in engagement has yet to be explained, and this will be an interesting topic in the years to come. This research needs to be done, so that all types of students can be reached. Students who remain unengaged, for whatever reason, will likely not persist in the residential community. They will probably choose to live off-campus altogether, thereby foregoing the benefits of campus life (Schudde, 2011).

It is also important to remember that, while points play a significant role in understanding engagement, rote participation is not the ultimate outcome to attain. It will not be enough for students to attend events if those events are not worth attending, if they do not benefit students, or if they are not executed in a way that promotes inclusion and learning. Harper, Hurtado, and Sax have all noted that "the quality of the interaction ... matters more than just engaging in the activity itself" (Wolf-Wendel, Ward, & Kinzie,

2009, p. 423). Evaluating quality will require assessments beyond points measurements. Wolf-Wendel et al. also assert that depth of experience is key to engagement.

While quality matters in creating and maintaining a student's environment, a question for further exploration is whether students still benefit from the action of participation. Furthermore, if they do, and if students can benefit from events regardless of their quality, simply because they are present, is it right to disregard event content or quality? Or, if students know of no reason to attend other than the need to earn points, yet they attend and still benefit, is this acceptable? These questions cut to the heart of the entire purpose or philosophy behind a points system. All administrative and leadership actions communicate some message to students. It is important to craft messages carefully and with integrity; in a way, this is a pedagogical process and must be conducted with a long-term vision about what students will learn through their engagement or participation.

As I state above, the idea of purposeless or unappealing activities does not sit well with me. I regard a points system as a valuable method of evaluating student membership and as a way to predict engagement. It is unclear whether the existence of the points system itself has actually improved engagement at Brooks College. Because of this, I do not think that students will long endure activities they do not enjoy. Furthermore, I maintain that it is only acceptable to rely on students coming to events out of compliance with the system for a limited time; after a number of events a student attends without a deeper sense of purpose, it seems likely that he or she will lose interest in not only the event, but in meeting any points expectations.

Implications for Current Practice

Residential college leadership which administers a points system without providing students with guidance or education as to its purpose may find that it has inadvertently sent a negative message. It may communicate that it regards them not as individuals who would benefit greatly from engaging in the community (and from whom the community would benefit), but rather as cogs in the system who must meet requirements in order to be “acceptable” members. It is therefore of utmost importance to clearly explain the intentions behind the system. I also recommend testing a points system soon after introducing it, to see if it is achieving any desired outcomes. To do this, college leadership needs to understand what the goals are in the first place.

Arboleda et al. (2003) state that “Information regarding which student traits are strongly associated with involvement in residence halls makes it easier to target and nurture those students who are most likely to play a productive role” (p. 520). It is clear that high points generally signify engagement; therefore, faculty and administrators would do well to take note of highly involved students and to capitalize on these students as movers and leaders in the student population.

Milem and Berger (1997) found that early involvement is an adequate predictor for future involvement. That said, one could assume that a student’s current points score is essentially not going to change drastically in the future, unless some intervention is made. Points can alert student affairs professionals and faculty as to when a positive intervention is necessary. Such interventions may simply entail engaging students in conversations to determine, subtly or plainly, why they are not participating and whether they are attitudinally or psychologically engaged. It may also include reiteration of

expectations, as well as encouragement and empowerment. These are all intrinsic motivators, and, if employed well, can contribute to meeting self-determination needs.

Limitations

One potential issue with using points as a measure of involvement is that some forms of involvement may be more effective for certain students (Wolf-Wendel, Ward, & Kinzie, 2009); this could mean certain events are more effective, or, as noted above, that students are engaging with the community in different, informal ways that are not recorded in points.

Another limitation is that students were surveyed only once, thereby providing a snapshot of their attitudes and feelings about Brooks. Porter (2011) notes that attitudes vary over time. In that case, a student may feel engaged one semester, but in the coming year he or she may encounter situations that cause that engagement to wane. The opposite may be true as well. A long-term study, conducted over at least two semesters, may yield more information about students' levels of engagement. It may also be helpful to survey students more than once per semester.

An obvious limitation of this study is that it was conducted at one institution, in one residential college. Institutional differences are significant, as are those between residential colleges at the same institution. A future study would do well to involve students from multiple universities.

Finally, the study only considers five independent variables, two of which were significant. If it were possible to conduct a study with results that explained more about the other three, as well as variables not included in this study, scholars might have a fuller picture of predictors of engagement.

Future Research and Recommendations

Based on the data and limitations, I offer the following suggestions for future researchers and administrators. Previously, I noted that different groups of students might be engaged in different ways. In further studies, an analysis of variance would shed light on differences between groups within a residential college, including whether certain events appeal to certain groups. Such a study would be an excellent foundation for a qualitative follow-up. A qualitative study with focus groups of residents would provide more nuanced and rich insights into the Brooks College community as students experience it.

An additional survey or focus group distinguishing between floors may shed light on different reasons for the higher likelihood of engagement on the second and third floors. If community leaders do have a significant influence on floor culture, student responses might be used as a form of feedback for CL evaluation. Other factors to consider would be the length of time a CL has had charge over a floor and the transitory nature of floor residents; the longer the same residents and CL remain on a floor, the more likely it is that a strong culture will form.

Although 38.1% of engagement can be explained by points and floor, there is still the other 61.9% to discover and understand. Arboleda et al. (2003) found that precollege characteristics play a role in involvement. A future study might inquire into these student attributes, such as whether students are first or second generation college students.

Due to the fact that student attitudes can change in a short period of time, it would be enlightening to survey the same sample of students more than once. There are numerous ways to do this. In a residential college that is about to implement a points

system, leadership could survey students before and after its implementation to determine whether there was any change in engagement scores. Future research should also include more frequent tests of a sample over a longer period of time, as well as at multiple institutions and residential colleges.

My hope is that engagement in a residential college would also lead to persistence. Therefore, another research opportunity is to discover how long students with high engagement levels stay in residential colleges? In addition, in this study I examined the points system as a method of programming; however, further programmatic investigation will help to provide a fuller picture of what particular practices are working.

Porter (2011) takes issue with the NSSE's concept and definition of engagement, due to the lack of justification for the items in the instrument. Part of the problem is that the definition is too broad. I believe that the scale used for the current study more accurately reflects engagement and defines it more narrowly. However, to improve validity, I would like to receive input from other scholars, as well as conduct a factor analysis for construct validity.

Conclusion

For students, faculty, and even institutional health, on-campus living is clearly significant. Students benefit academically and socially. In addition, the claims supporting the living-learning concept are substantial, and extend beyond student affairs literature. More specifically, residential colleges contribute to the holistic development of students by valuing learning in every context – from the classroom to the home.

Engagement also has been shown to improve students' collegiate experiences, as well as to increase their chances of persistence in college. Students have a need to belong

to a group of people, and to feel that they matter. Engagement both leads to and results from belonging, and is vital for a residential community's success. Residential colleges have a structure that lends itself to higher student engagement. Some residential colleges have implemented points systems as either a means of accountability for participation or of awarding involvement. While these measurements may improve engagement or at least accurately detect it, I have found no evidence accompanying these systems as to their actual effectiveness.

The findings in this study help to fill the gap in the literature and to inform the practices of those administering points systems, as well as those endeavoring to increase student engagement in living-learning programs of many kinds. Most notably, I found that points highly correlate with engagement, and such a strong relationship should not go unexamined. The answers I found have led to more questions, and I hope to join scholars in the continued search for truth about engagement, points, and the richness of student experiences.

APPENDIX

APPENDIX A

Survey Questions

Please respond to the following questions about your experience at Brooks College. If you are taking this survey, you are considered a member of Brooks College. All uses of the word 'community' refer to Brooks College.

I enjoy being a member of Brooks College.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I feel comfortable being authentic (my true self) at Brooks College.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

There is an active social environment at Brooks.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

There is an active learning (emphasis on intellectual growth) environment at Brooks.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I feel supported (cared for, uplifted) by Brooks members (these could be your good friends or just acquaintances).

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I feel supported (cared for, uplifted) by Brooks staff (any of the following: hall director, faculty master, chaplain, tutor, administrative assistant).

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I consider myself an active (involved to the best of my ability) member of the Brooks community.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

Brooks College is a caring environment.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I feel welcome at Brooks College.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

At Brooks, I know someone who is available to provide assistance to me if I feel lonely or depressed.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I feel liked by Brooks members (these could be your good friends or just acquaintances).

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I feel liked by Brooks staff members.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

My individuality is accepted at Brooks.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I am glad I am a member of Brooks College.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I feel accepted by Brooks members (these could be good friends or just acquaintances).

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I feel accepted by Brooks staff.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

Being involved (attending events, spending time with Brooks members or spending time around Brooks College) at Brooks is worth my time.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I feel connected (comfortable around, enjoy his or her company) to faculty at Brooks (any of the following: faculty master, professors with offices here, faculty partners).

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I matter to Brooks College.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I am respected as an individual at Brooks.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I have strong (dependable, genuine, loyal) friendships with students who are Brooks members.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I have strong (dependable, genuine, loyal) relationships with Brooks staff (any of the following: hall director, faculty master, chaplain, tutor, administrative assistant).

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

My input can make a difference in the Brooks community.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I am aware that Brooks has a leadership council.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I feel anonymous at Brooks.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I can express myself freely at Brooks.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I am significant in the Brooks community.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I have a desire to make a positive impact on the Brooks community.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I care about the traditions and heritage of Brooks College.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I feel a sense of responsibility for the well-being of the Brooks community.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

Being an active (involved to the best of my ability) member of Brooks is important to me.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I feel I have the ability to be autonomous (I have a choice over my actions) at Brooks.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I am committed to the Brooks College community.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I feel I have the ability grow in competence (I can improve my abilities and gifts) at Brooks.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

Being a leader (with or without a title) in the Brooks community is important to me.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I care about contributing to the Brooks community.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I feel in control of my membership at Brooks; I am able to make my own decisions at Brooks.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I can identify (relate) with Brooks members; I have something in common with them.

<input type="radio"/>	Strongly Agree
<input type="radio"/>	Moderately Agree
<input type="radio"/>	Slightly Agree
<input type="radio"/>	Slightly Disagree
<input type="radio"/>	Moderately Disagree
<input type="radio"/>	Strongly Disagree

I can identify (relate) with Brooks staff; I have something in common with them.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

Being an active (involved to the best of my ability) member of Brooks College is worthwhile to me (worth my time and effort).

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

I would like to help other members become more engaged (involved, invested, participating) in the Brooks community.

Strongly Agree

Moderately Agree

Slightly Agree

Slightly Disagree

Moderately Disagree

Strongly Disagree

What is your gender?

- Male
- Female
- Other gender identity

What is your classification (year in college)?

- Freshman
- Sophomore
- Junior
- Senior

What is your year in Brooks (how long have you been a member)?

- First year
- Second year
- Third year
- Fourth year
- Fifth year

On which floor do you live in Brooks?

- First floor
- Second floor
- Third floor
- Fourth floor

Please list your major:

Please choose your race or ethnicity:

- American Indian/Alaska Native/Native Hawaiian
- Asian/Asian American/Pacific Islander/South Asian
- Black/African American
- Multiracial/Multiethnic
- Hispanic/Latino(a)
- White/Caucasian
- Other

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