Living on Campus & Building Community through Social Media

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Submitted to the Faculty of Extension

University of Alberta

In partial fulfillment of the requirements for the degree of

Master of Arts in Communications and Technology

August 1, 2018

Acknowledgments

I would not have been able to complete this body of work without the unwavering support of friends, family, colleagues, and especially my fellow members of the 2016 MACT cohort. I would like to express gratitude to my supervisor, Dr. Rob McMahon for his support and guidance, not only as a professor leading me from concepts into applied actions, but also as my academic supervisor, pushing me to produce the best work possible. I would also like to thank the students who took time out of their busy academic schedules to participate in this study—without them the study and findings wouldn't exist at all.

I would also like to express my sincere thanks to Dr. Gordon Gow, and again Dr. Rob McMahon, for allowing me to participate as a Graduate Research Assistant in association with their important work in Technology Stewardship in a Community of Practice in Trinidad and Tobago. The opportunity to be a part of their research, in partnership with the University of Guelph and the University of the West Indies, was invaluable in helping me better understand community informatics, technology stewardship, and ultimately helped me shape my own capstone project. I cannot express my appreciation to you both!

Disclaimer

The views expressed in this capstone project are those of the author and do not reflect the views of the University of Alberta, the Faculty of Extension, or the Communications and Technology Graduate Program.

Abstract

The purpose of my research is to understand whether the use of social media helps upper-year undergraduate students living on campus at the University of Alberta build a sense of community. Existing research on this topic focuses largely on positive "student outcomes" as a result of living on campus, which include things like: higher GPAs; greater access to resources; higher rates of graduation; and the ability to build community and stronger networks. Most of this research focuses on first-year students, and there is a knowledge gap with regards to the experiences of upper-year undergraduates. Through this exploratory study, I wish to learn more about how social media plays a role in the outcome of building community for students living on campus, through the lenses of Uses and Gratifications Theory and the Student Integration Model.

The results of the research will provide value to the existing research in this area of study, especially given that there are few studies that focus on the population of upper-year undergraduates, are based in Canadian institutions, and that focus on technology in relation to community building in this context. Student Affairs professionals will benefit from the results of the study because having a fulsome understanding of the experiences and interests of each "type" of student that lives on campus can only benefit their ability to deliver effective programming, facilitate positive experiences, and learn more about the students that choose to live on campus. The study will contribute to the dense existing research conducted in this area, providing further insights into students' use of social media while living on campus, and whether the use of those media helps them to build community and foster engagement.

Keywords: information communication technologies, social media, community building, engagement, higher education, student integration, technology, student satisfaction.

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Introduction

The literature surrounding higher education tells us that students who live on campus in their first year of university are more successful in their academic and personal endeavors. Students who live on campus typically achieve positive "student outcomes" which means that they typically retain higher GPAs, graduate faster, build lifelong networks and community bonds, and have greater access to resources that support them through their transition from high school to university (Astin, 1984 & 1993; Bohr, Desler, Inman, Nora, Pascarella, & Zusman, 1993; Pike, 2002; Pascarella & Terenzini, 1991). Despite these proven advantages, The University of Alberta, among other Canadian institutions, has experienced a slight increase in vacancy in their student housing system (from 2014 through to 2017) by about 3%. This is due largely to a shift in student needs, attitudes, and most importantly, as discussed below, measurable student outcomes in regards to the benefits of living on campus (Hurlburt, 2017). Many higher education institutions rely on these outcomes in order to recruit students to live on campus, and to have report a high level of satisfaction in reference to their on-campus experience.

There are many factors that contribute to a student reporting positive outcomes in regards to living on campus. These factors include things like cost, location, ability to build community, state of the facilities, access to technology, network connections, and much, much more. Each of these factors requires careful attention when one considers the larger picture of persistence through university and positive student outcomes. In this study, I focus on just one of these factors of student satisfaction: community building and engagement as it relates to technology. It is well documented that living on campus can foster an increased sense of community (Cheng, 2004). Today we see communities forming online as people seek to "join groups, voluntary

associations" and gain "social support" (Kiesler, Kraut, and Ren, 2007) in the age of the internet. Although the concept of "community" remains fluid, its importance is often supported by claims of the need for information sharing, emotive and social support systems, companionship, and simply for entertainment, as we seek to understand how to properly and effectively engage users in digital communities. According to a study by Yuquing Ren, Robert Kraut, and Sara Kiesler (2007) on common identity and bond theory, online communities "depend upon the commitment and voluntary participation of their members," and "community design" ultimately affects how people can interact.

Community building in the university residence context reflects these definitions, especially in relation to the construction of social support systems through the use of various types of technologies available to these communities. Given the rapid advancements of technology, one of the ways that students build community is through their use of Information Communication Technologies (ICTs). By ICTs, I'm referring to technologies that "provide access to information through telecommunications" (Christensson, 2010). ICTs focus primarily on communication technologies, which include the internet, networking systems, social media, cell phones, streaming devices, and other communication mediums. Further to the context of my study, I've decided to focus on the use of technology as a potential means for upper-level undergraduate students to build their sense of community while living on campus. Furthermore, student affairs professionals cite that the experiences of students living on campus observably change over time, developing from the growing and fluctuating needs of students living in these communities, which can include their propensity for adopting different types of technology/ICT (Ausiello & Wells, 1997).

Since there are a variety of complex factors that contribute to positive student outcomes in on-campus housing, the following literature review focuses on my interest in community building and engagement. I summarize some of the theories that support student engagement, ICT use for college students living on campus, and the need for increased community building and engagement. I frame this work in a way that recognizes impacts to persistence and retention in reference to the student-lifecycle as a whole. To do this, I adopt the student lifecycle model developed by Alf Lizzio and Keithia Wilson (2010), which outlines five aspects of student success. The lifecycle model suggests that successful transition into university is predicted by "five core aspects: capability, purpose, resourcefulness, connectedness and culture" (p. 1). A lens of recruitment (see Figure 1 below) can be applied to the student lifecycle which includes the recruitment of prospective students, their acceptance, persistence to graduation, graduation, and finally their alumni status (Higher Education, 2007). In an article published in *"Studies in Higher Education"* author Paula Wilcox et al. (2006) explores the role of social support in the context of retention for students attending university. She says that, "equal emphasis needs to be placed on successful integration into the social world of the university as into the academic world" (p. 707), which directly relates to the concept of community building in my study. Based on the Student Integration Model a students' "sense of connectedness" needs to take place in order for them to persist to graduation, and my study hopes to discover how upper-year undergraduates are developing this sense of belonging, and whether technology is facilitating those connections as well. There is research that supports these findings related to social integration for first year students, illustrated in Wilcox's study for example, however there is little research in this regard for upper-year undergraduates.
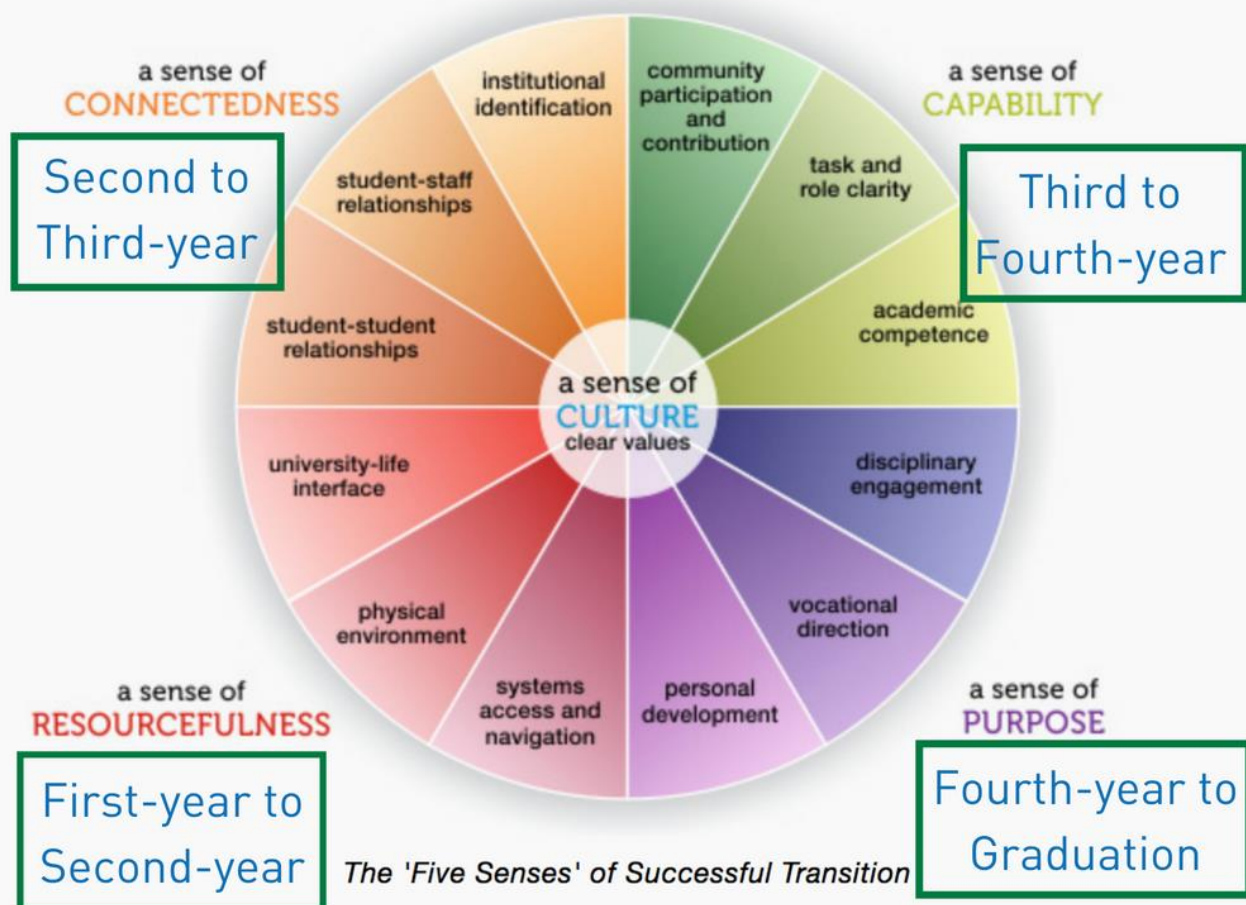
Figure 1: Student lifecycle model with years of study

Literature Review Methodology

A thorough literature review is one that methodically examines the current literature to determine validity, relevance, and value. There is no need to duplicate work if the question has already been posed elsewhere, and there is little value in asking a question that doesn't have relevance on a larger scale (Oliver, 2012). In the following literature review, I explore primary research data, conduct an exhaustive search for topical discussions on the issue, and present my summarized findings of a review of academic and professional journals, edited research books, and grey literature. The literature cogitates technological advances and student engagement as it

relates to: community building, student engagement and the facilitation of student learning with technology in an on-campus setting.

Research Questions & Search Strategy

The current literature in this area of study focuses very much on student satisfaction and the on-campus living experience, as measured through quantitative research and statistical analysis; however, the focus is largely on first-year students, and their experiences of satisfaction, academic performance, and retention. This study addresses a gap in the research regarding student (specifically, the population of upper-year undergrads) use of ICTs while living on campus. It also contributes qualitative data to an existing body of research that is almost exclusively quantitative.

Originally, the purpose of my research was to better understand how upper-year undergraduate students living on campus at the University of Alberta use ICTs to connect with their peers and administration. Considering the definition of ICTs is extremely broad, and because I did not want to over-determine the outcomes of this study, I did not narrow the focus of exactly which ICTs I would focus on. For example, upper-year undergraduates may use text messaging as a primary way to build community, or they might have a propensity for online chat rooms, live-stream gaming environments, and more. Before conducting my qualitative research, I decided to survey the sample population of upper-level undergraduates about this question. This pre-interview questionnaire indicated that the primary ICT that the respondents, 9 upper-year undergraduates living on East Campus, are engaging with while living on campus is social media. This result framed the study going forward, as I narrowed by focus from the broad spectrum of ICTs, to social media.

Given these preliminary considerations, I decided to ask the following research questions (RQs):

RQ1: How are upper-year undergraduate students living on campus at the University of Alberta using social media?

RQ2: Does the use of social media while living on campus facilitate student outcomes related to community building and engagement?

My search strategy began with gathering articles from journals on the student experience living on campus, mostly from institutions in the North America. There are many published works dating back to the 1970s that use quantitative data to support findings that living on campus leads to increased student satisfaction. These journal articles provide the foundation for my research question, in that they inform the connection between student outcomes and living on campus, which is a premise of the research. Furthermore, student use of ICTs on campus is considered a contributing factor to positive student outcomes. I then searched for articles that were focused on the models and theories used to support my research questions: the Student Integration Model and Uses and Gratifications Theory. From there, I searched specifically for topical information on the student experience, measures of satisfaction with living on campus, how technology relates to this experience, and finally, how we can effectively facilitate ICT use and students' connection to campus and their communities.

Scoping Search & Search Protocols

In order to effectively organize my findings, I conducted a scoping search that lead me to my primary sources, and searched specific databases in order to analyze the relevant literature.

The primary databases I searched to conduct the literature review were: (a) Information and Communication Technologies, (b) Academic Search Complete, (c) Communication & Mass Media Complete, (d) Science Direct, (e) Education, and (f) Google Scholar. The secondary databases that I included were: (g) ERIC, (h) ProQuest Education Database, and (i) CBCA Education. I then created a spreadsheet that organized the sources into the following categories: Theory, Higher Education & Residence Halls, Students & ICTs, and Community Building & Engagement. The search terms I used to search for relevant literature in these databases included:

- **Information Communication Technologies on campus:** ICT use by students living on campus, ICTs in higher education, ICTs on campus, digital media and students in higher education, and ICTs and the student experience.

- **Measures of student satisfaction:** student satisfaction living on campus, living on campus and retention, student needs living on campus, and student outcomes and living on campus.

- **Measures of student engagement living in residence**: student engagement on campus, residence programming, social networking systems on campus, residence halls and student integration.

- **Technology and engagement on campus:** technology and students in higher education, building community with technology on campus, and technology and the student experience.

- **Community building and engagement:** building community on campus, community engagement and students living in residence halls, and residence halls and community engagement.

- **Student Integration Model:** student integration and retention, student integration on campus, student integration and technology, student integration and student outcomes, and social networking and the student integration model.

- **Uses & Gratifications Theory:** students and technology on campus, technology and gratification in higher education, uses and gratifications on campus, social networking and uses and gratifications theory.

By searching for relevant literature through these protocols, my research questions began to transform as I realized I needed to complete several important tasks as the literature review developed, including: clearly defining "Information Communication Technologies" to narrow the scope, focusing on how ICTs can facilitate the student outcome of community building and engagement, and restricting my sources to those dated after 1990 to be statistically relevant. I only allowed sources dated before 1990 to be theoretically based or focused within higher education as a foundation for the research. As my RQs began to become more focused, I was able to determine a value matrix to organize my sources based on specific inclusion and extraction criteria.

Inclusion & Extraction Criteria

In order to measure relevance to my RQs, the following value matrix was assigned to each source. This approach helped me to eliminate 25 articles that were not relevant to a systematic review for my capstone. I created the criteria to evaluate each source and assigned it a score; the value scale was also color coded for visual ease of review.

Value Matrix	
	8, 9, 10 out of 10: Highly valuable • **Highly relevant:** publication date 2010 or later, topical value criteria includes (1) ICTs, (2) theoretical framework, and (3) community engagement practices. • High author status, well-known journal/publisher. • Study conducted in university residence. • Measures student outcomes.
	5, 6, 7 out of 10: Moderately valuable • **Moderately relevant:** publication date 2000 or later, includes at least one of three topical values noted above. • Moderate author status, moderately known journal/publisher. • Study conducted in community that includes students.
	1, 2, 3, 4 out of 10: Not valuable • **Not relevant:** publication date before 1990, includes no topical values noted above. • Disproven research, weak RQ or data sets, no peer reviews. • Low author/publisher status. • Does not include concepts involving student outcomes or community engagement.

Table 1: Literature Review Value Matrix

Theoretical Context

There are two important theories that underscore my research: the Student Integration Model, and Uses and Gratifications Theory. There is a breadth of research (Astin, 1984; Thomas, 2000; Tinto, 1993) that explores student retention, integration, and persistence to graduation in higher education. The authors assert that the factors related to persistence in college include: pre-

entry characteristics, institutional characteristics, academic integration, and social integration. The connection to my research is based within social integration practices, and the relationship between the structural competencies/characteristics of Student Affairs offices and how they impact student engagement and integration. Ultimately, social networking and social relations have direct and indirect influences on student outcomes and integration—a relationship which serves as a foundation for the premise of my research.

Uses and Gratifications Theory provides a framework of understanding the human motivations to engage with social networking sites, the internet, and ICTs generally, especially as it relates to community engagement and building social ties. This classic communications perspective serves an important role in grounding my RQs, and providing context for the purposeful sample population that I will be studying, considering college students are among the highest users of technology today (Jones, 2002).

Student Integration Model

When applied for choices around residence housing, the student integration model theorizes that "successful [student] integration" will enhance student satisfaction and experiences, which will influence their intentions to 'persist' to live on any given university campus (Tinto, 1993). The model provides a framework for understanding the congruent relationship between the needs and values of the institution and the needs and values of the students, and in the context of my study, how that relationship is impacted by ICTs in terms of building a sense of community. The area of focus for my study in relation to the student integration model is the aspect of the "social system" in Tinto's Student Integration Model. Outlined in the figure below, community-building, assessed alongside ICT use, would be defined by a students' external interactions (outside of

academics), peer group interactions, and extra-curricular activities, leading to social integration

(Tinto, 1993).
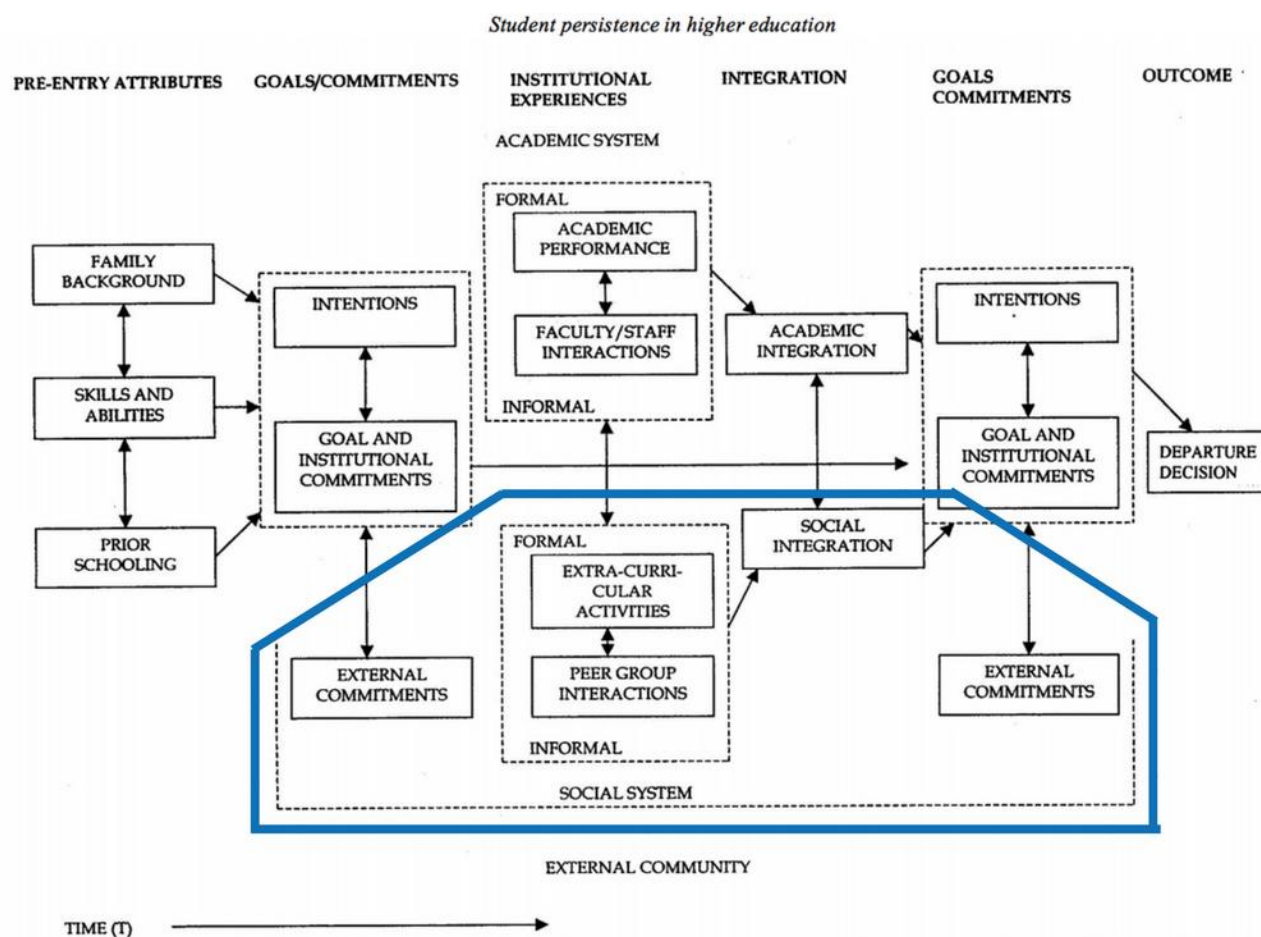
Figure 2: Tinto's Student Integration Model with a community-building focus area highlighted for the purposes of this study

In *"The Ties that Bind,"* Scott Thomas (2000) also adapts Tinto's Student Integration

Model, by outlining how social networking systems impact social ties and bonds (community-

building) with students participating in higher education environments. This research lays

important groundwork for "understanding student integration…and the role of social interactions

in the persistence and attrition process," (p.21) which is directly related to my research question.

My research examines social media use among students living in residence at the University of

Alberta as it relates to community building, and applies the Student Integration Model to assist with understanding of the differential effects of social network characteristics on student persistence in living on campus. Meaning that the impact of social media technology on students' ability to build community will vary depending on the needs of the community and the level of dependency on these various technology platforms/applications.

Uses & Gratifications Theory

According to Thomas Ruggiero, in an article published in the journal of *"Mass Communication & Society"* in 2000*, "...*the emergence of computer-mediated communication has revived the significance of uses and gratifications. In fact, uses and gratifications has always provided a cutting-edge theoretical approach in the initial stages of each new mass communications medium: newspapers, radio and television, and now the internet" (p. 17). Uses and Gratifications theory can help us understand not only media and technology adoptions among specific populations, but also can help us measure levels of fulfillment as it relates to qualitative inquiry (Ruggiero, 2000). His article states that researchers must explore the social and "qualitative aspects" of mediated communication in a more holistic methodology, which my study posits.

Uses and Gratifications applies to my research questions because according to a survey of college students distributed by the Higher Education Research Institute, 94% use technology in their daily lives (Higher Education, 2007). The pervasiveness of new media and technology has impacted the way that we communicate, both in person and online, on an almost incomprehensible level. The foundations of this theory will guide my research by helping to define the social and psychological variables that contribute to various patterns of consumption of gratifications (Wimmer & Dominick, 1994), which will help inform the overall research

design. For example, Uses and Gratifications theory outlines how "dependency is high when an individual's goal satisfaction relies on information from the media system" (Ruggeiro, 2000), which is an important piece to understanding why students in residence are interacting with certain ICTs over others. As noted earlier, students indicated that certain social media facilitated their ability to build a sense of community, thus increasing their dependence on that media. In an effort to measure this dependency as it related to Uses and Gratifications theory, students were also asked which social media they could "do without" versus the ones that they "need" in order to create lasting networks and connections with their peers while living on campus. Uses and Gratifications Theory will also help guide the analysis of the research findings, so that we can understand *why* students engage with certain social media platforms, and what they perceive to gain from it.

Summary of Literature Review Findings

As noted in the introduction, the current literature regarding the student experience with living on campus is primarily quantitative and focuses on measurable satisfaction data of positive student outcomes. What the literature review reveals in relation to my research questions is that there is a definite relationship between living on campus and student satisfaction, student integration practices and student engagement with ICTs, and community building and engagement is indeed a positive student outcome. There are four sections that demonstrated these connections through the literature review, and they are: Supporting Theories; Higher Education & Student Residence Halls; Student Use of ICTs; and Community Building & Engagement.

Supporting Theories

Many of the studies that focus on measuring positive student outcomes discussed earlier in this paper indicate that students report higher levels of satisfaction when they have access to a

high-speed internet connection. Use and Gratifications theory contributes to explaining how

"high speed internet connection" ranks as a top factor of student satisfaction living in residence

(Li et al., 2005), and outlines the motivations of technological dependence and gratifications.

The Student Integration Model, as discussed, provides a comprehensive framework for

understanding positive student outcomes related to integration, engagement, and the impacts that

social integration has on the college student experience. Some articles in the review contribute to

simply understanding these two theories (Blumler, 1979; Chatman, 1991; Whiting, & Williams,

2013), but others are directly connected to college student use of ICTs, higher education, the

residence hall environment, and community building and engagement (Chen, 2011; Matthews &

Schrum, 2003; Quan-Haase, 2008; Skinner, 2009; Thomas, 2000; Vaterlaus, 2017).

The most important articles for my RQs, are the ones that demonstrated a correlation

between Uses and Gratifications Theory or the Student Integration Model, and community

building through ICTs with college students. Some studies focused on particular ICTs (Twitter,

Yik Yak, Facebook, etc.) and drew conclusions on how the use of ICTs, underscored by the

theories, impacted community involvement and engagement for students living on campus. For

example, in *"Instant Messaging on Campus: Use and Integration in University Students'*

Everyday Communication," author Anabel Quan-Haase (2008) outlines how researchers have

begun exploring how university students "use IM and how it is integrated into their social and

academic life" (p. 105). Of the 268 Canadian university students surveyed, 97% reported using

instant messaging technologies on campus (Quan-Haase, 2007). Quan-Haase also discusses the

"connectivity movement" and how an emergent spectrum of ICTs support community

development and drive social ties in university residence communities. This data would assist

any higher education or student affairs staff member understand the positive and negative factors

that contribute to residence hall retention as it relates to integration of ICTs. This type of

research is the foundation for my research project, because it not only outlines the benefits of

living on-campus, but it provides an "enhanced ability to understand the significance of various

predictors of student residential choices" (Li et al., 2005). Most importantly, the study reveals

that the number one predictor for *both* student retention and exodus of residents is the level of

satisfaction with access to services (which includes a high-speed internet connection). Further to

that, the results emphasize the need to provide strong ICT services to students. The research

proves that a satisfying residence experience will attract prospective residents, but in the same

vein, a poor experience will result in attrition.

Higher Education & Student Residence Halls

The research in this category (Blimling, 2015; Cavins & Johnson, 1996; Cullum, 2007;

Foubert, Morrison, & Tepper, 1998; Hill, 2004; Junco & Chickering, 2010; Li et al., 2005;

Matthews & Schrum, 2003; Murrell & Denzine, 1998; Pike, 1999; Schroeder & Mable, 1994)

focuses on the "educational potential" and "developing community" of residence halls. It calls on

a body of research that supports the positive relationship between campus residence and rates of

student outcomes, including: perseverance, graduation, academic success, community

engagement and network building, and more. The findings combine the documented success of

faculty involvement programs, first-year programs, theme housing programs, residential college

programs, and living-learning centers—as they all contribute heavily to retention rates in

university (Cavins & Johnson, 1996). The researchers also summarize how student affairs

professionals might respond to challenges facing student-housing practices, and how these

professionals can promote increasing positive student outcomes. The articles from this section of

the literature review are very important, because the environment in which my purposeful sample

is being drawn from is the university residence community, and the particular outcome that my research focuses on is community building and its correlation with student use of ICTs.

The strategies in these articles are important because they not only capture various contributors to student satisfaction, but also include influences on the undergraduate experience overall, including the use of ICTs, which are a focus of my RQs. The authors delve into the importance of offering creative living and learning experiences that extend beyond the first year of the college experience, and highlight the importance of Student Affairs staff and faculty involvement. Much of the literature quotes Schroeder, Mable, & Associates (1994) in an effort to describe the current challenges within higher education. For example, Calvins & Johnson (1996) state that,

> "As colleges and universities across the country are being challenged by economic agendas, shifting demographics, increasingly diverse student populations, public demand for quality and accountability, and faculty concerns about the widening gap between ideal academic standards and actual student learning, residence halls have an opportunity to shape the transformation of higher education" (p. 73).

There is purposeful insight into the importance of creating an engaging student experience outside the classroom from the contents of these articles and studies. Additionally, the results, discussion, and analyses of the research in higher education and residence halls impacts my research question because of the demonstration of student outcomes as a continuum, wherein the authors summarize the need for change in residence services program offerings and facilities, in order to support positive student outcomes. This continuum represents a year-to-year change in the needs of students as it relates to their experience on campus, and if we are measuring the positive outcomes, we need to continue to assess what those needs are over time.

Several important sources also delve into the social responsibility and accountability that student affairs professionals face regarding leveraging technology in "educationally relevant" ways. The authors continue to discuss promoting civil discourse in the age of emergent technology, while balancing student development, learning, and social engagement. The contents of these articles are directly related to my research topic, as I aim to understand ICT use among upper-year undergrads living on campus at the University of Alberta.

Student Use of ICTs

The research in this category (Anderson, 2001; Ausiello & Wells, 1997; Chen, DeAndrea et al., 2012; Engstrom, 1997; Gatz & Hirt, 2000; Gemmil & Peterson, 2006; Heiberger & Harper, 2008; Junco & Chickering, 2010; Kvavik, 2004; Ratliff, 2011; Vaterlaus, 2017) focuses on the pervasiveness of technology and how it impacts student outcomes, the work of Student Affairs, and the overall impacts on higher education. Moneta (2005), for example, explores how student use of technology has changed the expectations of student affairs, what the resource implications (financial, human, and technological) associated with technology are, and what distinctive technological applications are influencing the work of Student Affairs. General results from several authors indicate that Student Affairs professionals need to provide direct human services support to students, while simultaneously recognizing that these supports have been derived from the increased ICT use among college students.

Many articles focus on ICT use among college students, especially as a means to understand whether the use of these technologies is in response to social pressures, preference, or if they support community building and engagement. In a study published by the Higher Education Research Institute (2007), college freshmen are surveyed regarding their use of social networking sites. The results of the survey help to correlate time spent on social networks and

student time-management skills. The data from this study is important in outlining the need to focus on emergent technologies as it relates to the residence experience. On that vein, in *"Connecting on Campus with New Media: Introduction to Higher Education Administration with Social Media,"* authors Wankel & Wankel (2011) explore how "social media initiatives and activity are transforming the very nature of collegiate life." This article, and ones similar, underscore the importance of leveraging new forms of technology to communicate with students, while simultaneously furthering the "achievement of institutional goals and student outcomes." This is highly relevant, as my research will provide insight into student needs and attitudes as it relates to their ICT use while living on campus.

In *"Information Technology and Student Affairs: Planning for the Twenty-First Century"* authors Ausiello and Wells (1997) discuss "a new vision for practice that incorporates emerging technology (p.71) and addresses the questions what the role of Student Affairs staff will be in regards to the student experience and technology. The authors explore how Student Affairs staff can encourage community members to become familiar with and embrace ICTs, given that it is integral to the social systems being built by their students.

Most importantly, the studies in this area outline the importance of ICT use among college students, how the use of those technologies can impact them dramatically (both positively through engagement practices and negatively through dependence and access issues), and the role ICTs play as a facilitation tool for social support in the college on campus living environment. For example, in *"Internet Use Among College Students: An Exploratory Study"* by K. Anderson (2001), 1,300 college students at 8 American institutions were surveyed in reference to how the internet has "affected their social or academic lives." The study was designed as an introductory investigation into internet usage among college students, driven by

students reporting concerning symptoms (depressed mood, high degree of sleep variance, poor academics, and conflicts) in an effort to identify contributors to the symptoms. The study reviews the current research on the positive and negative effects associated with internet usage, particularly for college students and the "commonality of developmental issues." Conclusions show that the problem of "internet dependence is real" and that student affairs professionals need to be more aware of excessive internet use among college students (Anderson, 2001). As just one example, the perspectives in this study are important to my RQs because the internet dramatically affects the ICTs addressed in my research, and the sample population is in line with the research as well. ICT use and face-to-face interactions are represented as a continuum over time, shaping how students engage, connect, and build community.

Community Building & Engagement

During the literature review, there were many articles (Aber et al., 2013; Astin, 1993; Brown-Leonard et al., 2007; Cavins & Johnson, 1996; Cullum, 2007; Kanoy et al., 1996; Kuh & Zao, 2004; Kruger, 2000; Ried et al., 2014; Pike, 1991; Wankel & Blessinger, 2003) that contained crossover between the themes demonstrated in community building and engagement, ICT use among students in college, and the residence hall environment. Building strong community ties became the linchpin connecting all sections of the literature review and my RQs. The theories supplied the framework for the topic, the research in higher education and residence hall living demonstrated the importance of student outcomes, ICT use among students became a clear predictor of positive student outcomes, and community building and engagement revealed itself as the primary focus tying all of subjects together. The literature demonstrates a continuum of cogitating technological advances and student engagement as it relates to: community

building, student engagement, and the facilitation of student learning with technology in an on-campus setting.

In one particular study for example, 344 undergraduate participants, half living in a residence hall containing a living-learning community (LLC) and half that did not, completed demographic survey followed by a "sense of belonging subscale" developed from the Perceived Cohesion Scale (Bollen & Hoyle, 1990). Data was analyzed by measuring students "perceptions of sense of community in residence, activities that foster sense of community in residence, meanings attributed to LLCs, and sense of belonging on campus" (p. 226). Results indicated that the study adds to the current literature on undergraduates' sense of community when comparing living on campus to studying on campus (Aber et al., 2013). The information in this study is integral to the foundation that supports my RQ—that students' cohorts or communities fundamentally enhance student outcomes. The study concludes that Student Affairs professionals should focus on programming that encourages informal peer interactions and opportunities for students to convene. My RQ addresses whether technology has a role to play in these opportunities, and whether it aligns with student perceptions on the subject.

Many of the studies reviewed demonstrate how student college life contributes to their perception of campus community. This concept is incredibly important to my RQ because it discusses the fundamental attitudes that students have towards campus community, which is a measurable student outcome assessed for students living in residence (connection to campus/community). Findings from the study "*Students' Sense of Campus Community: What it Means, and What to do About It*" by Cheng (2004) indicate that students' sense of community was associated with feelings of "being cared for, valued as an individual, and accepted as part of a community" (p. 218) The discussions in this study point to sociality and the strength of ties

between community members, which underscores my RQ, as I aim to learn whether ICTs can facilitate these network connections. One of the main composite variables, assessed on a 4-point Likert Scale in this study was "Residential Experience" which provided important insight into my RQs, given that "students' residential experience proves to be critical in influencing their sense of campus community, positively or negatively" (p. 224) Community building and engagement as a theme began to permeate as the strongest linkage between all of the themes during the literature review.

Gaps in Literature

Gaps in the literature, as they relate to my research questions, are that the articles are primarily quantitative studies on predictors of student satisfaction for undergraduates living in residence, and that there is little independent research done on each individual student outcome. For example, there is a significant amount of research that assesses student satisfaction, but there is little research on each of the factors that make up the student experience, whether it is assessing cost versus community, facility satisfaction versus location, etc. There's also a primary focus on the role of ICTs as it relates to communication patterns, but not specifically on how those patterns of use facilitate the student outcome of community building, and how ICTs relate to academic performance, as opposed to the residence community experience. There were also several limitations in relation to this literature review, including the literature that focuses on ICTs being disruptive and as adding stress to the student experience. These concepts are sometimes explored in the literature that I reviewed; however they are not a driving focus.

Through the stages of the literature review, I completed several important tasks that relate to my Capstone research design:

- **Changed the sample population.** Much of the literature already focuses on first-year students, and I want to learn more about upper-year undergraduates and their habits, as it is under-researched and shows a gap in the literature.

- **Changed the RQs.** Over the course of many months, the focus of my RQs shifted from a general concern on retention practices and vacancy rates, to a focus on one specific student outcome (social media facilitating community building and engagement). This revised focus lends itself neatly to the scope of the capstone and its limitations.

- **Reduced Data Gathering Strategy.** Originally, I intended to sample a larger student population, and was going to conduct in-person interviews and focus groups. I decided to only conduct in-person semi-structured interviews, as a direct outcome of my adjusted scope of the research topic.

Methodology

Research Questions & Method

As noted, the current literature in this area of study focuses very much on student satisfaction and their on-campus living experience, as measured through quantitative research and statistical analysis. However, the focus of this research is largely on first-year students, and their satisfaction, academic performance, and retention. My research focuses on another population: upper-year undergraduate students. The purpose of my research is to understand whether the use of social media helps upper-year undergraduate students living on campus at the University of Alberta build community. This addresses a gap in the research regarding the use of social media by these students while living on campus. As well, my research contributes

qualitative data to a body of existing research that is primarily quantitative. We already know that college students are among the highest users of the internet, and that they are engaging with various ICTs on a daily basis. One study from the United States found that 90% of college students aged 18-25 are using social media on a daily basis while in university, and 68% of those students report using social media between 1 and 6 hours per day (Vaterlaus, Jones, Patten & Cook, 2015). In this context, my research seeks to understand whether this type of engagement is helping students build community —which can be a factor of retention, ultimately building on the student lifecycle of living on campus. First-year undergraduate students typically build community in residence, but this tapers off for upper-level undergraduates, as their areas of focus shift (Cavins & Johnson, 1996). In this context, where upper-level undergraduates may not have the same face-to-face opportunities to build and sustain community, social media may help.

For clarity, my research questions (RQs) are:

RQ1: How are upper-year undergraduate students **living on campus** at the University of Alberta using social media?

RQ2: Does the use of social media while living on campus facilitate student outcomes related to community building and engagement?

Research Method

As discussed, much of the research surrounding student affairs in higher education focuses on quantitative methods and analysis. Given the scope of the Capstone, and in reference to the gap that my research question is trying to fill, qualitative description will serve as the most appropriate research method for my proposed project. According to Margarete Sandelowski in

her article *"Whatever Happened to Qualitative Description"* published in the *Journal of Research in Nursing and Health,* she notes that "…qualitative descriptive study is the method of choice when straight descriptions of phenomena are desired" and that qualitative description is "especially amenable to obtaining straight and largely unadorned (i.e.: minimally theorized or otherwise transformed or spun) answers to questions of special relevance to practitioners and policy makers" (p. 334).

The relevance of my research is that it helps us to learn more about a specific target populations' needs, specifically as to how these needs relates to the challenge of retention in residence, and of the ability of upper-year undergraduates to build purposeful communities at the University of Alberta. We can make assumptions about the social media usage of students that live in residence in relation to their experience living on campus, or we can use the proposed research questions to analyze what the true activities of the population are, in order to enhance their experience living on campus. What other factors may contribute to upper-year undergraduates' ability to build community? Does social media play the role we assume it plays, or are there specific reasons this population elects to use specific platforms to build their networks?

Most of the research in this area of study is focuses on the needs of first-year students as they complete the transition from high school to university. But when we look at the student life-cycle as a whole, upper-year undergraduates make up a large number of residents living on campus at the University of Alberta. We do not know enough about this population's experience with technology and in building a strong sense of community. The more that we can understand and isolate populations within the student life-cycle, the better we can provide them with the resources and services that they need to succeed throughout their post-secondary education.

Along with research on social media adoption and use among this under-studied population, analysis through qualitative description will assist Student Affairs professionals at the University of Alberta in developing a more comprehensive understanding of one of their largest client groups. As applied research, I hope that this project will support purposeful programming, enhanced information sharing and communication strategies, and ultimately contribute to efforts to increase student retention in residence.

Sampling Strategy

The population for my research project was purposefully sampled from students in the residence system at the University of Alberta. There are approximately 4,500 students that live on campus throughout any given academic term, and approximately 2,000 of those students live on East Campus, which is designated mostly for upper-year undergraduates and graduate students. The students that live in these buildings are described by Residence Services at the University of Alberta as mature, independent, and academically focused. The community itself has less of an "institutional" feel; it mimics mature neighborhoods in the surrounding area. The style of residences in this area are mostly walk-up apartment/townhouse style, with configurations ranging from studio apartments, to one, two, and four bedroom units, with shared common spaces and kitchen facilities. Students can choose from a range of options, all within steps of campus, that are more aligned with an independent living style.

Comparatively, the closest residence in size to the ones that make up East Campus is a large complex on North Campus, called Lister Residence. It typically houses anywhere from 1,800 to 2,000 students, mostly in their first year of study. This building is dormitory style, complete with a mandatory meal plan, to assist students in their often-challenging transition from high school to university. All students who live in residence receive targeted programming from their

Residence Life team, which supports their specific needs during their academic journey at the University of Alberta. Students on East Campus are typically supported academically, rather than with a social focus, given the phase of life that these students are generally in. Comparatively, first year students receive programming that will support them in living away from home for the first time, with a large focus on building personal networks and building community.

It would not be beneficial to attempt to conduct my research on the entire residence population (nor the entire population that resides in East Campus), because it would take an unacceptable amount of time to reach saturation in regards to the data that I will be collecting. Purposeful samples "intentionally focus on the target group to the exclusion of other groups" (Smith, 1988), and cannot be used for generalizations. Generalizations about research populations are typical for quantitative research and are not practical for qualitative research. Therefore I have decided to conduct an exploratory study, which may inform larger-scale studies, such as quantitative surveys across this population. Given the limitations of the Capstone, this study is exploratory in nature to learn more about a specific population, their use of social media, and whether the use of that media impacts their ability to build community and foster their personal networks. The study will provide a rich understanding of this population's social media use, in the specific condition of living on campus, which will provide useful context for studies in this research area going forward.

For this study I sampled 9 residents in East Campus from houses that contain upper-year undergraduate students. Each of these residences contains male and female residents, aged ~18-35, with various origins, ethnicities, and are enrolled in a variety of academic programs. The aim of qualitative research is to describe the specific characteristics of a phenomenon, which is what my research question posits. In theory, this study could be replicated in the future to focus on

other populations, like international students, graduate students, pre-professional students, or any other niche group that requires more attention in terms of defining how these groups build effective communities.

Data Gathering Strategy

In order to collect data about my purposeful sample population in relation to my research question, I conducted semi-structured (focuses on participant understanding of experiences) face-to-face interviews. The University of Alberta already uses a longitudal survey-benchmarking tool called Skyfactor (formerly Educational Benchmarking Inc.) that is distributed to all residents, across all facilities on an annual basis. I analyzed the data collected in 2016/17 and 2017/18 through that survey to serve as background. In that survey, residents are asked 3-4 questions in reference to building community in residence, and 1-2 questions regarding the provision of internet services, which would classify as a technology-based question. I parsed the data to only include answers from my sample population, to provide a basis for my research questions, and also to demonstrate the need to build on this data with qualitative research, and ask more questions about the specific outcome of "community building." Therefore, analyzing this secondary data was completed as "Phase 1" of my research, and conducting the in-person, semi-structured interviews was "Phase 2."

To recruit participants for Phase 2, I invited them to participate through an existing Residence Newsletter, which is distributed via a bi-weekly email listserv. Students on East Campus typically have leases from September to April of an academic year, and receive the newsletter throughout the semester informing them of campus events, activities, resources available, etc. The strategy was executed to invite upper-year undergrads to participate in the research via the listserv, which I received permission to use from Residence Services as part of

an "Information Sharing Agreement" (see Appendix B), over a number of weeks until I was able to recruit and secure enough participants. Students received information about the study and were invited to complete a short pre-interview questionnaire that outlined the process and confirmed their participation. The students also provided some basic demographic information and some insight into their current social media habits (see Appendix C for a copy of the pre-interview questionnaire).

This population can be difficult to engage with, especially in the Winter Term, due to a variety of factors. Students are survey fatigued at this time, are preparing for exams, and are moving out of residence immediately after their exam period is complete. Participation was incentivized because of these factors, whereby participants received a $10 Starbucks gift card as a thank-you for their time and participation in the study i.e.: filling out the pre-interview questionnaire and completing the in-person interview. I was able to secure 9 participants through this process, and 7 met my criteria for final data analysis.

Interviews

Face-to-face interviews were conducted for the purposes of this study. This was done in order to build trust with my participants in an informal setting. Additionally, face-to-face interviews are also an appropriate method for qualitative research. My position in Ancillary Services at the University of Alberta provides me with access to the sample population; however, I am cognizant that the power-dynamic may impact the data. "Sometimes, face to face interviews can foster apprehension in participants, especially if a researcher asks to enter a participant's home" (Merrigan et al., 2012). This is why I conducted the interviews in public areas or student common areas and/or lounges. I wanted the participants to feel comfortable in answering the

questions designed for the face-to-face interviews, so that the data collected "are less likely to foster artificial effects" (Merrigan et al., 2012).

The interviews contained a mixture of open-ended, closed-format, and contingency questions, with careful consideration to not include leading questions. Conducting face-to-face interviews can be costly in terms of labor and time, depending on how they are designed and delivered, and this was considered during the planning phase, especially in reference to potential ethical conflicts between the participants and myself. Copies of the interview questions are available to view in Appendix D.

Analysis & Findings

After receiving approval from the University of Alberta's Research Ethics Office, students were recruited to participate in the study by the process listed above, and a total of 9 students were interviewed. All 9 participants were recruited digitally via the Residence Services email listserv, and all 9 participants completed a pre-interview questionnaire through a Google form. 2 interviews were removed from the data set after it was revealed during the interview process that they did not meet the criteria for participation. These two students, respectively, are graduate students living on East Campus at the University of Alberta, but indicated that they were in their "second year" on the pre-interview questionnaire. These students interpreted the question to be a reflection of their current studies, as they are in the second year of their graduate studies; however, the study explicitly stated that the purposeful sample population of this study is upper-year undergraduates (Appendix C). The data from the 2 graduate interviews were still recorded and transcribed, but were not included in the final analysis of the data.

Phase 1: Secondary Data Analysis

As part of background research for this study, I obtained permission to access data from the University of Alberta's Residence Satisfaction & Learning Survey, which is administered annually by Skyfactor (formerly Educational Benchmarking Inc.), an assessment and benchmarking service for higher education. As mentioned in the data gathering strategy, this survey is administered to all students living on campus at the University of Alberta and in 2017/18 had 1585 responses, with approximately 44% coming from upper-year undergraduates in East Campus (Campus Labs, 2018). The survey asks institutional specific questions, and also provides cross-institutional comparisons on specific factors that make up "student satisfaction" (Skyfactor, 2018). The survey assesses student outcomes on an annual basis, and provides Student Affairs professionals at the University of Alberta a comprehensive report that demonstrates areas of focus: where students are succeeding; where they could use improvement; and facilities that require focus for future development. The survey also demonstrates how the University of Alberta compares to other institutions across North America, in reference to positive student outcomes like higher GPAs, satisfaction with dining services, their ability to build community, measured success of cohort communities, and more.

The survey asks many questions, but for the purposes of this study, I isolated the responses from upper-year undergraduates on a set of specific questions that lend background to this study and my research questions. Considering I want to understand how students living on campus at the University of Alberta are using social media to build community, I isolated the questions in the satisfaction survey that focus on the concept of community building, and any technology-related questions. Through an Information Sharing Agreement (Appendix B), I received data from the 2016/17 report and the 2017/18 report. The results for 2016/17 are below:

Answer: Sophomore/2nd year by
Q077. Personal Interactions - To what extent has living in on-campus housing enhanced your ability to: Meeting other people

N = 258
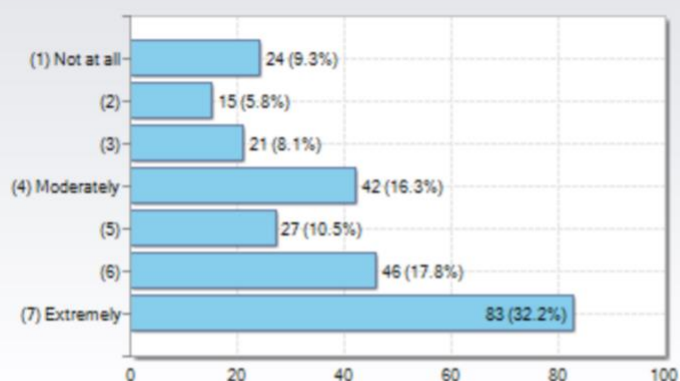
Answer	N	% of Total	% of Population
(1) Not at all	24	9.3 %	1.5 %
(2)	15	5.8 %	0.9 %
(3)	21	8.1 %	1.3 %
(4) Moderately	42	16.3 %	2.6 %
(5)	27	10.5 %	1.7 %
(6)	46	17.8 %	2.8 %
(7) Extremely	83	32.2 %	5.1 %

Answer: Junior/3rd year by
Q077. Personal Interactions - To what extent has living in on-campus housing enhanced your ability to: Meeting other people

N = 179

Answer	N	% of Total	% of Population
(1) Not at all	19	10.7 %	1.2 %
(2)	11	6.2 %	0.7 %
(3)	9	5.1 %	0.6 %
(4) Moderately	37	20.9 %	2.3 %
(5)	26	14.7 %	1.6 %
(6)	31	17.5 %	1.9 %
(7) Extremely	44	24.9 %	2.7 %

Answer: Senior/4th year by
Q077. Personal Interactions - To what extent has living in on-campus housing enhanced your ability to: Meeting other people
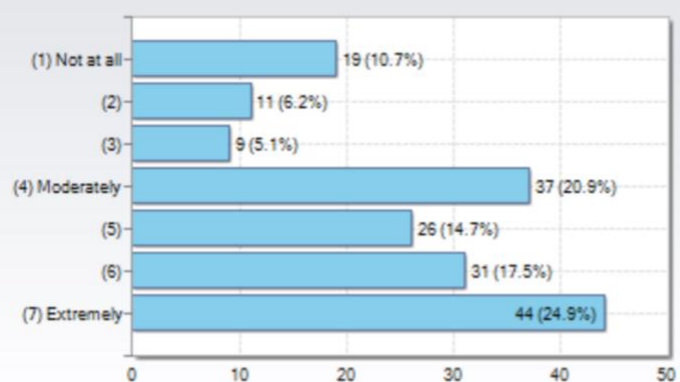
N = 144
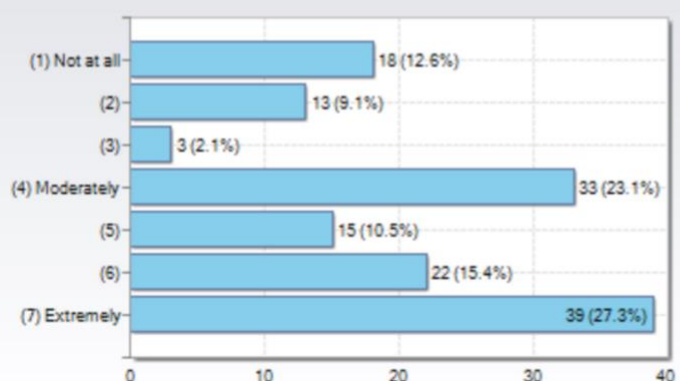
Answer	N	% of Total	% of Population
(1) Not at all	18	12.6 %	1.1 %
(2)	13	9.1 %	0.8 %
(3)	3	2.1 %	0.2 %
(4) Moderately	33	23.1 %	2.0 %
(5)	15	10.5 %	0.9 %
(6)	22	15.4 %	1.3 %
(7) Extremely	39	27.3 %	2.4 %

Answer: Sophomore/2nd year by
Q076. In your living area (i.e., floor, apt. section, community, house) to what degree do you: Feel accepted by other students

N = 263
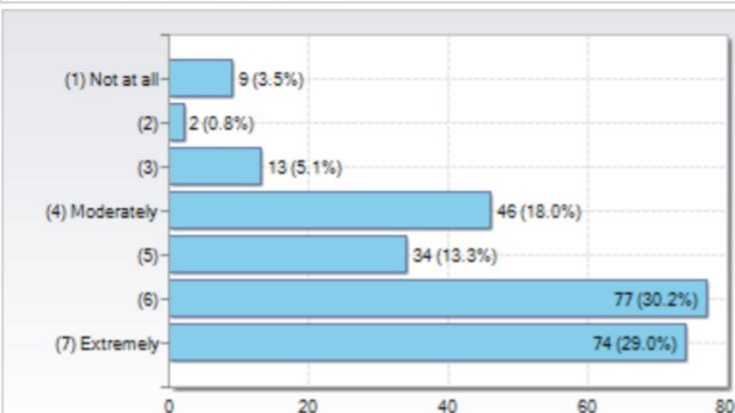
Answer	N	% of Total	% of Population
(1) Not at all	9	3.5 %	0.6 %
(2)	2	0.8 %	0.1 %
(3)	13	5.1 %	0.8 %
(4) Moderately	46	18.0 %	2.8 %
(5)	34	13.3 %	2.1 %
(6)	77	30.2 %	4.7 %
(7) Extremely	74	29.0 %	4.5 %

- (1) Not at all: 9 (3.5%)
- (2): 2 (0.8%)
- (3): 13 (5.1%)
- (4) Moderately: 46 (18.0%)
- (5): 34 (13.3%)
- (6): 77 (30.2%)
- (7) Extremely: 74 (29.0%)

Answer: Junior/3rd year by
Q076. In your living area (i.e., floor, apt. section, community, house) to what degree do you: Feel accepted by other students

N = 179

Answer	N	% of Total	% of Population
(1) Not at all	8	4.7 %	0.5 %
(2)	2	1.2 %	0.1 %
(3)	6	3.5 %	0.4 %
(4) Moderately	27	15.7 %	1.7 %
(5)	40	23.3 %	2.4 %
(6)	38	22.1 %	2.3 %
(7) Extremely	51	29.7 %	3.1 %

- (1) Not at all: 8 (4.7%)
- (2): 2 (1.2%)
- (3): 6 (3.5%)
- (4) Moderately: 27 (15.7%)
- (5): 40 (23.3%)
- (6): 38 (22.1%)
- (7) Extremely: 51 (29.7%)

Answer: Senior/4th year by
Q076. In your living area (i.e., floor, apt. section, community, house) to what degree do you: Feel accepted by other students

N = 143
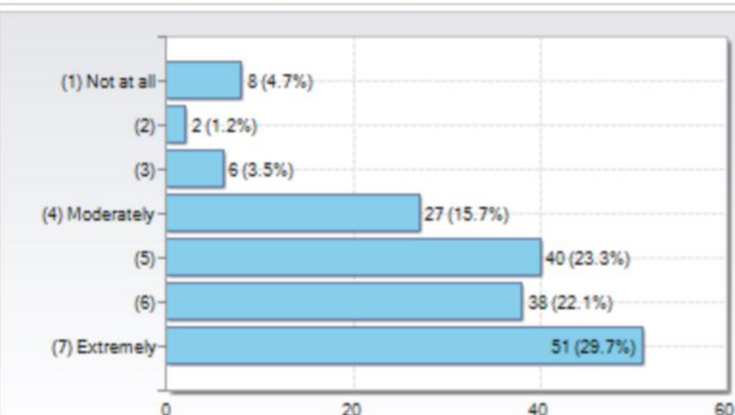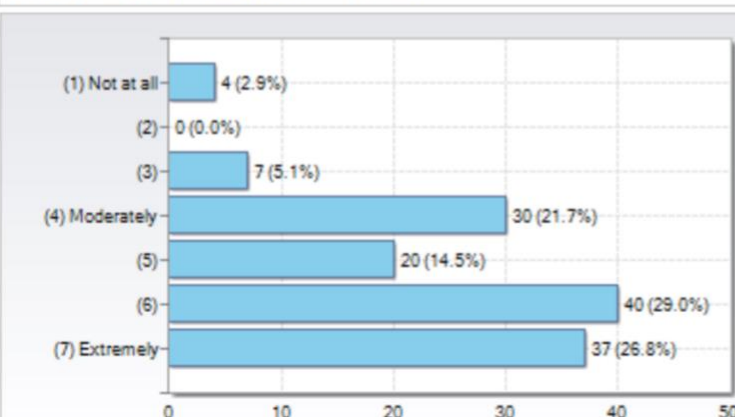
Answer	N	% of Total	% of Population
(1) Not at all	4	2.9 %	0.2 %
(2)	0	0.0 %	0.0 %
(3)	7	5.1 %	0.4 %
(4) Moderately	30	21.7 %	1.8 %
(5)	20	14.5 %	1.2 %
(6)	40	29.0 %	2.4 %
(7) Extremely	37	26.8 %	2.3 %

- (1) Not at all: 4 (2.9%)
- (2): 0 (0.0%)
- (3): 7 (5.1%)
- (4) Moderately: 30 (21.7%)
- (5): 20 (14.5%)
- (6): 40 (29.0%)
- (7) Extremely: 37 (26.8%)

Answer: Sophomore/2nd year by
OQ5. Institution Specific Questions - I feel like someone in residence cares about my well being and would notice if I were in need of assistance.

N = 246
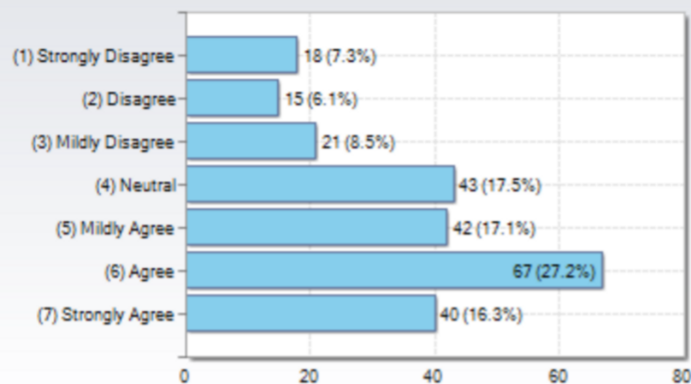
Answer	N	% of Total	% of Population
(1) Strongly Disagree	18	7.3 %	1.1 %
(2) Disagree	15	6.1 %	0.9 %
(3) Mildly Disagree	21	8.5 %	1.3 %
(4) Neutral	43	17.5 %	2.6 %
(5) Mildly Agree	42	17.1 %	2.6 %
(6) Agree	67	27.2 %	4.1 %
(7) Strongly Agree	40	16.3 %	2.4 %

Chart data:
- (1) Strongly Disagree: 18 (7.3%)
- (2) Disagree: 15 (6.1%)
- (3) Mildly Disagree: 21 (8.5%)
- (4) Neutral: 43 (17.5%)
- (5) Mildly Agree: 42 (17.1%)
- (6) Agree: 67 (27.2%)
- (7) Strongly Agree: 40 (16.3%)

Answer: Junior/3rd year by
OQ5. Institution Specific Questions - I feel like someone in residence cares about my well being and would notice if I were in need of assistance.

N = 167

Answer	N	% of Total	% of Population
(1) Strongly Disagree	22	13.2 %	1.3 %
(2) Disagree	14	8.4 %	0.9 %
(3) Mildly Disagree	12	7.2 %	0.7 %
(4) Neutral	43	25.8 %	2.6 %
(5) Mildly Agree	26	15.6 %	1.6 %
(6) Agree	31	18.6 %	1.9 %
(7) Strongly Agree	19	11.4 %	1.2 %

Chart data:
- (1) Strongly Disagree: 22 (13.2%)
- (2) Disagree: 14 (8.4%)
- (3) Mildly Disagree: 12 (7.2%)
- (4) Neutral: 43 (25.8%)
- (5) Mildly Agree: 26 (15.6%)
- (6) Agree: 31 (18.6%)
- (7) Strongly Agree: 19 (11.4%)

Answer: Senior/4th year by
OQ5. Institution Specific Questions - I feel like someone in residence cares about my well being and would notice if I were in need of assistance.
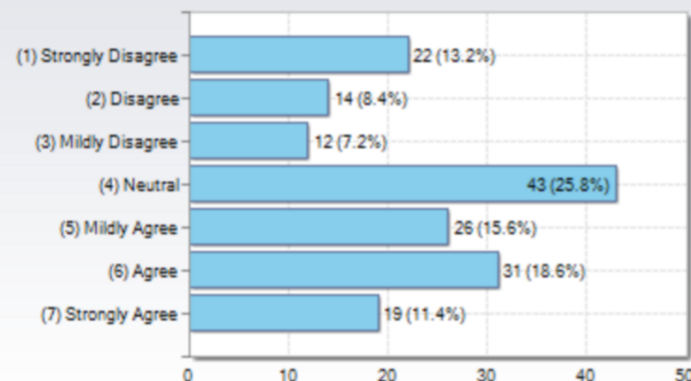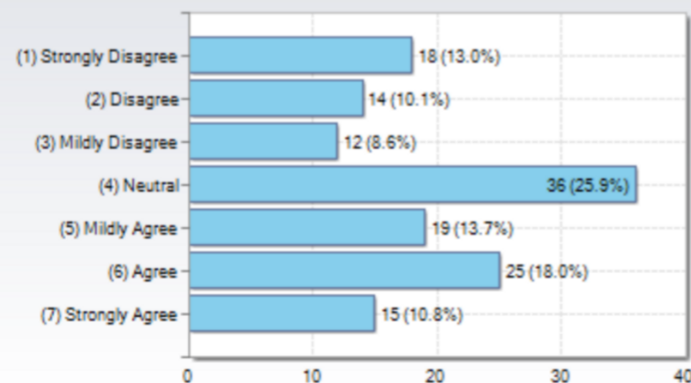
N = 139

Answer	N	% of Total	% of Population
(1) Strongly Disagree	18	13.0 %	1.1 %
(2) Disagree	14	10.1 %	0.9 %
(3) Mildly Disagree	12	8.6 %	0.7 %
(4) Neutral	36	25.9 %	2.2 %
(5) Mildly Agree	19	13.7 %	1.2 %
(6) Agree	25	18.0 %	1.5 %
(7) Strongly Agree	15	10.8 %	0.9 %

Chart data:
- (1) Strongly Disagree: 18 (13.0%)
- (2) Disagree: 14 (10.1%)
- (3) Mildly Disagree: 12 (8.6%)
- (4) Neutral: 36 (25.9%)
- (5) Mildly Agree: 19 (13.7%)
- (6) Agree: 25 (18.0%)
- (7) Strongly Agree: 15 (10.8%)

Answer: Sophomore/2nd year by
Q093. Overall Evaluation - To what degree has living in on-campus housing positively contributed to your: Sense of belonging to this institution

N = 256
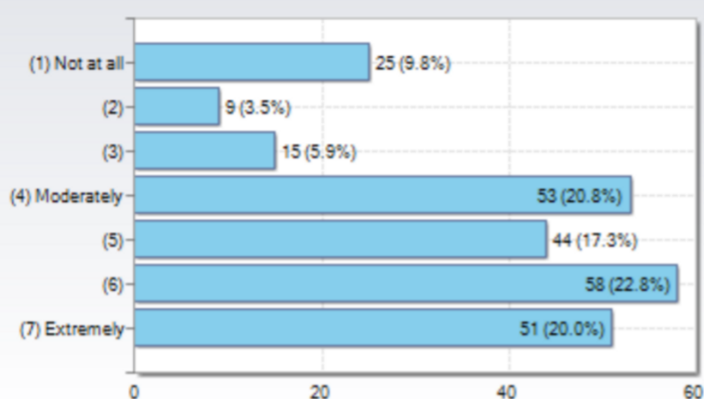
Answer	N	% of Total	% of Population
(1) Not at all	25	9.8 %	1.5 %
(2)	9	3.5 %	0.6 %
(3)	15	5.9 %	0.9 %
(4) Moderately	53	20.8 %	3.2 %
(5)	44	17.3 %	2.7 %
(6)	58	22.8 %	3.5 %
(7) Extremely	51	20.0 %	3.1 %

Answer: Junior/3rd year by
Q093. Overall Evaluation - To what degree has living in on-campus housing positively contributed to your: Sense of belonging to this institution

N = 176

Answer	N	% of Total	% of Population
(1) Not at all	13	7.4 %	0.8 %
(2)	12	6.9 %	0.7 %
(3)	11	6.3 %	0.7 %
(4) Moderately	34	19.4 %	2.1 %
(5)	39	22.3 %	2.4 %
(6)	28	16.0 %	1.7 %
(7) Extremely	38	21.7 %	2.3 %

Answer: Senior/4th year by
Q093. Overall Evaluation - To what degree has living in on-campus housing positively contributed to your: Sense of belonging to this institution
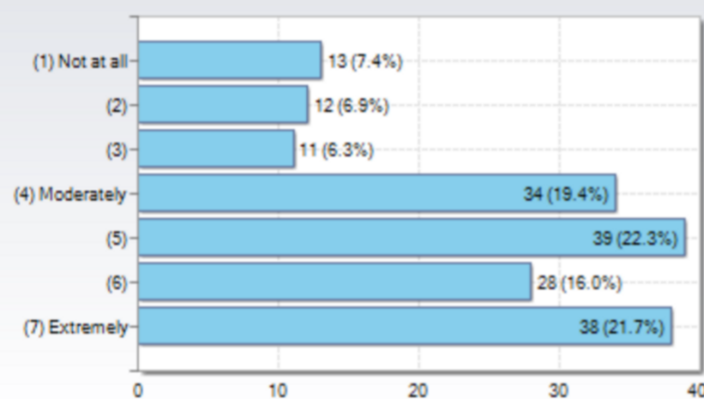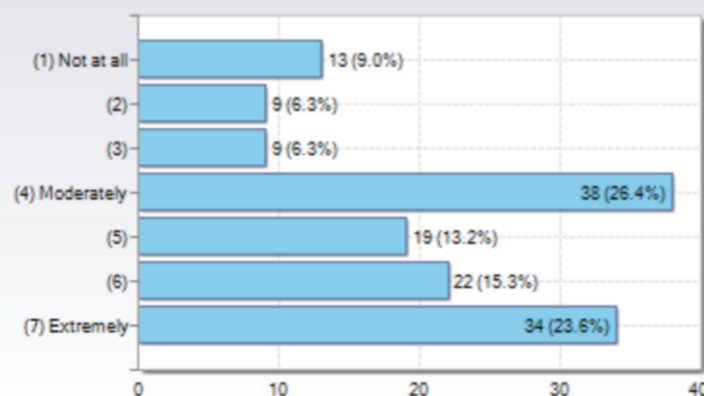
N = 144

Answer	N	% of Total	% of Population
(1) Not at all	13	9.0 %	0.8 %
(2)	9	6.3 %	0.6 %
(3)	9	6.3 %	0.6 %
(4) Moderately	38	26.4 %	2.3 %
(5)	19	13.2 %	1.2 %
(6)	22	15.3 %	1.3 %
(7) Extremely	34	23.6 %	2.1 %

Answer: Sophomore/2nd year by
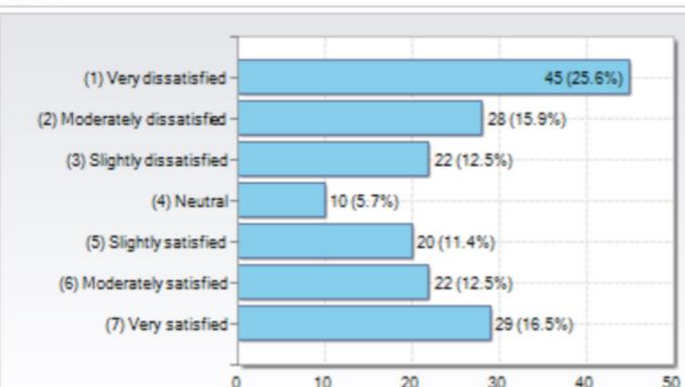**Q040. Hall/Apt. Environment - How satisfied are you with: Internet connectivity in your room**

N = 263
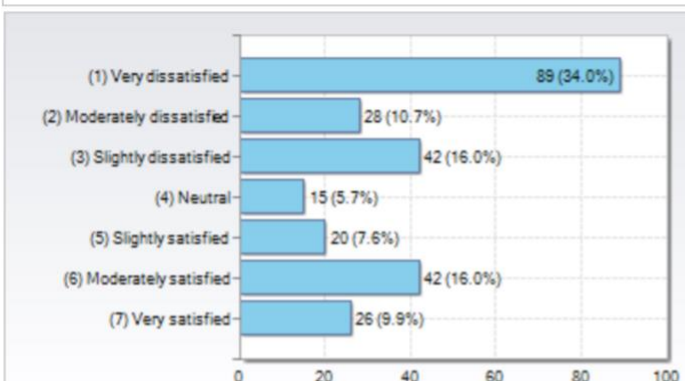
Answer	N	% of Total	% of Population
(1) Very dissatisfied	89	34.0 %	5.4 %
(2) Moderately dissatisfied	28	10.7 %	1.7 %
(3) Slightly dissatisfied	42	16.0 %	2.6 %
(4) Neutral	15	5.7 %	0.9 %
(5) Slightly satisfied	20	7.6 %	1.2 %
(6) Moderately satisfied	42	16.0 %	2.6 %
(7) Very satisfied	26	9.9 %	1.6 %

Chart values:
- (1) Very dissatisfied: 89 (34.0%)
- (2) Moderately dissatisfied: 28 (10.7%)
- (3) Slightly dissatisfied: 42 (16.0%)
- (4) Neutral: 15 (5.7%)
- (5) Slightly satisfied: 20 (7.6%)
- (6) Moderately satisfied: 42 (16.0%)
- (7) Very satisfied: 26 (9.9%)

Answer: Junior/3rd year by
Q040. Hall/Apt. Environment - How satisfied are you with: Internet connectivity in your room

N = 179

Answer	N	% of Total	% of Population
(1) Very dissatisfied	45	25.6 %	2.7 %
(2) Moderately dissatisfied	28	15.9 %	1.7 %
(3) Slightly dissatisfied	22	12.5 %	1.3 %
(4) Neutral	10	5.7 %	0.6 %
(5) Slightly satisfied	20	11.4 %	1.2 %
(6) Moderately satisfied	22	12.5 %	1.3 %
(7) Very satisfied	29	16.5 %	1.8 %

Chart values:
- (1) Very dissatisfied: 45 (25.6%)
- (2) Moderately dissatisfied: 28 (15.9%)
- (3) Slightly dissatisfied: 22 (12.5%)
- (4) Neutral: 10 (5.7%)
- (5) Slightly satisfied: 20 (11.4%)
- (6) Moderately satisfied: 22 (12.5%)
- (7) Very satisfied: 29 (16.5%)

Answer: Senior/4th year by
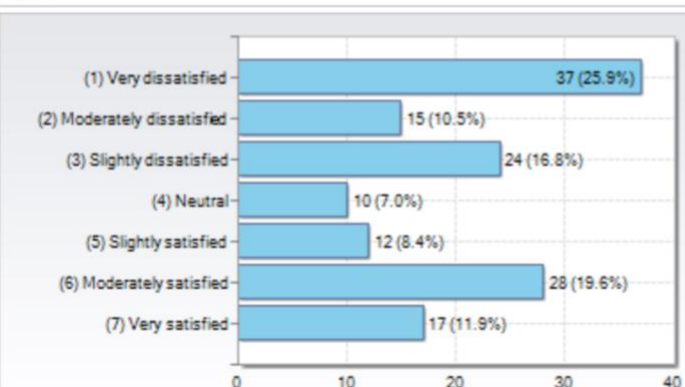**Q040. Hall/Apt. Environment - How satisfied are you with: Internet connectivity in your room**

N = 149

Answer	N	% of Total	% of Population
(1) Very dissatisfied	37	25.9 %	2.3 %
(2) Moderately dissatisfied	15	10.5 %	0.9 %
(3) Slightly dissatisfied	24	16.8 %	1.5 %
(4) Neutral	10	7.0 %	0.6 %
(5) Slightly satisfied	12	8.4 %	0.7 %
(6) Moderately satisfied	28	19.6 %	1.7 %
(7) Very satisfied	17	11.9 %	1.0 %

Chart values:
- (1) Very dissatisfied: 37 (25.9%)
- (2) Moderately dissatisfied: 15 (10.5%)
- (3) Slightly dissatisfied: 24 (16.8%)
- (4) Neutral: 10 (7.0%)
- (5) Slightly satisfied: 12 (8.4%)
- (6) Moderately satisfied: 28 (19.6%)
- (7) Very satisfied: 17 (11.9%)

These results can tell us generally about community-building on campus, but it also demonstrates a gap in our understanding of *how* this community-building is taking place, and through what means. For example, when students are asked to what degree they feel "accepted by others" (Skyfactor, 2017) in the 2016/17 academic term, 29.0% of second-year undergraduate students felt "extremely" accepted by other students. 30.2% rated this question a 6 on scale of 7, and only 18% felt moderately about being accepted. There were very similar results for third-year undergraduates, where 29.7% felt extremely accepted, 22.1% rated 6 out of 7 and only 4.7% said they don't feel accepted at all (Skyfactor, 2017). Fourth-year undergraduate students mirrored these results as well, whereby 29.7% felt extremely accepted, 29.0% rated 6 out of 7 and 21.7% felt moderately accepted by other students. This data shows clearly that students are feeling comfortable with their peers and are building thriving communities. However, we don't know how they are achieving this, and whether technology plays a role.

When students were asked to what degree they feel that living in residence has helped them meet people, which is a cornerstone of building a sense of community, 32.2% of second year undergraduate students rated that their ability to meet people was increased, a rating of 7 out of 7 on the scale. 17.8% of these students rated the question 6 out 7 on the scale, and 16.3% felt that living in residence as moderately impacted their ability to meet people (Skyfactor, 2017). Third-year undergraduates felt slightly differently on this question, as only 24.9% gave a 7 out of 7 on the scale. 20.9% felt moderately about their ability to meet people, and 10.7% felt that living in residence hasn't helped them meet people at all. Fourth-year undergraduates had more dispersed results, with 27.3% rating 7 out of 7, 23.1% were moderately impacted, and 12.6% said living in residence hasn't helped them meet people at all (Skyfactor, 2017). Again, this data is clearly showing us that upper-year undergraduates feel that they have had a greater ability to

meet people, but we don't know where these interactions are taking place, we don't know if the connections area primarily with their roommates, classmates, or clubs on campus. My study aims to find out more about these community building activities.

When students were asking whether they feel that, as a byproduct of living on campus, if someone would care about their well-being or notice if they needed assistance, only 16.7% of second-year undergraduate students felt "extremely" positive in regards to this question, rating it 7 out of 7 on the scale. 27.2% gave 6 out 7 on the scale, and 17.5% felt neutral about the question (Skyfactor, 2017). 18.6% of third-year undergraduates agreed to a 6 on the scale, whereas 25.8% felt neutral about it, and 13.2% disagreed entirely. When it comes to fourth-year undergraduates, 13.0% also disagreed that someone would notice if they needed assistance or cared about their wellbeing as a result of living on campus. 25.8% felt neutrally about it, and 18.0% agree that someone would care if they needed help. In regards to this question, not a lot of students felt strongly that someone would be there if they needed it. Why is that? If the sense of community is strong within this group, why do they feel neutrally about someone noticing if there was a threat to their well-being?

In 2016/17, when students were asked whether living on campus has contributed to their sense of belonging to the University of Alberta, 20.0% of second-year undergraduates felt an extreme sense of belonging to the institution, 22.8% rated a 6 out of 7 on the scale, and 20.8% felt a moderate sense of belonging (Skyfactor, 2017). 22.3% of third-year undergraduates gave a rating of 6 out 7 on the scale, 21.7% felt an extreme sense of belonging to the institution, while 18.4% feel a moderate sense of belonging. When it comes to the fourth-year undergraduate results, 9.0% felt zero sense of belonging to the University of Alberta. 22.6% on the other hand, felt an extreme sense of belonging, and 26.4% felt moderately about it. In this case, most

students feel an enhanced sense of belonging to the institution, which could lead one to believe that their sense of community is strong and is thriving. If living in residence makes upper-year undergraduate students feel a high sense of belonging, perhaps we can figure out more details on why that is, and why a large number of students also feel a moderate sense of belonging.

The only question that the Student Satisfaction and Learning Survey asks in relation to technology, is to what degree they feel satisfied by their internet connection. We know that college students are among the highest users of the internet, so it is not surprising that 34.0% of second-year undergraduates feel very dissatisfied with their internet connectivity. 16.0% of students, respectively, feel both slightly dissatisfied and moderately satisfied, whereas only 10.7% feel moderately dissatisfied (Skyfactor, 2017). Fewer third-year undergraduates felt very dissatisfied at 25.6%, and 16.5% very satisfied while 15.9% felt moderately dissatisfied. 25.9% of fourth-year undergraduates felt very dissatisfied with their internet connectivity, 19.6% felt moderately satisfied and 16.8% felt only slightly dissatisfied with the quality of their internet provision on campus. We ask about internet connectivity in terms of a technology-related question, but we have don't know what the students are relying on their internet connection for. We can assume that it is so that they can stream Netflix and play Xbox One, but we don't really know, and this demonstrates the gap in the research. What does the data tell us right now? Basically, it tells us that the strength of the internet connection likely varies based on residence-type, which would impact which groups of students would feel satisfied or unsatisfied. What we don't know is what the students are primarily using this technology for, and what their expectations of the service are, and we definitely don't know if their internet connection is helping them build community.

In 2017/18, Residence Services at the University of Alberta collected the data in-house through their own researchers, called Campus Labs. The questions were replicated from the Skyfactor survey for validity, and some extra, institutional-specific questions were asked. The results for all upper-year undergraduate students are below:

Q1. Which area do you live in?

Summary View		Lister		Michener Park		Newton Place		East Campus (All other Residences, including Residence Saint-Jean)		Total	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
✖ Q98. **As a result of your experience living in residence, to what degree are you better able to . . .** - Meet other people?	A great deal	0	0.00 %	0	0.00 %	0	0.00 %	38	10.83 %	38	10.83 %
	Considerably	0	0.00 %	0	0.00 %	0	0.00 %	63	17.95 %	63	17.95 %
	Somewhat	0	0.00 %	0	0.00 %	0	0.00 %	92	26.21 %	92	26.21 %
	Slightly	0	0.00 %	0	0.00 %	0	0.00 %	89	25.36 %	89	25.36 %
	Not at all	0	0.00 %	0	0.00 %	0	0.00 %	69	19.66 %	69	19.66 %
	Total	0	0.00 %	0	0.00 %	0	0.00 %	351	100.00 %	351	100.00 %

Summary View		Lister		Michener Park		Newton Place		East Campus (All other Residences, including Residence Saint-Jean)		Total	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
✖ Q142. Please indicate your level of agreement with the following statements: - I feel like someone in residence cares about my well being.	Strongly agree	0	0.00 %	0	0.00 %	0	0.00 %	52	15.07 %	52	15.07 %
	Somewhat agree	0	0.00 %	0	0.00 %	0	0.00 %	119	34.49 %	119	34.49 %
	Neutral	0	0.00 %	0	0.00 %	0	0.00 %	97	28.12 %	97	28.12 %
	Somewhat disagree	0	0.00 %	0	0.00 %	0	0.00 %	30	8.70 %	30	8.70 %
	Strongly disagree	0	0.00 %	0	0.00 %	0	0.00 %	47	13.62 %	47	13.62 %
	Total	0	0.00 %	0	0.00 %	0	0.00 %	345	100.00 %	345	100.00 %

Summary View		Lister		Michener Park		Newton Place		East Campus (All other Residences, including Residence Saint-Jean)		Total	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
✖ Q143. Please indicate your level of agreement with the following statements: - I feel like someone in residence would notice if I were in need of assistance	Strongly agree	0	0.00 %	0	0.00 %	0	0.00 %	43	12.46 %	43	12.46 %
	Somewhat agree	0	0.00 %	0	0.00 %	0	0.00 %	90	26.09 %	90	26.09 %
	Neutral	0	0.00 %	0	0.00 %	0	0.00 %	72	20.87 %	72	20.87 %
	Somewhat disagree	0	0.00 %	0	0.00 %	0	0.00 %	60	17.39 %	60	17.39 %
	Strongly disagree	0	0.00 %	0	0.00 %	0	0.00 %	80	23.19 %	80	23.19 %
	Total	0	0.00 %	0	0.00 %	0	0.00 %	345	100.00 %	345	100.00 %

Summary View		Lister		Michener Park		Newton Place		East Campus (All other Residences, including Residence Saint-Jean)		Total	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
✖ Q158. **To what degree has living in residence positively contributed to your . .** - Sense of belonging to the University of Alberta?	A great deal	0	0.00 %	0	0.00 %	0	0.00 %	55	16.03 %	55	16.03 %
	Considerably	0	0.00 %	0	0.00 %	0	0.00 %	76	22.16 %	76	22.16 %
	Somewhat	0	0.00 %	0	0.00 %	0	0.00 %	109	31.78 %	109	31.78 %
	Slightly	0	0.00 %	0	0.00 %	0	0.00 %	44	12.83 %	44	12.83 %
	Not at all	0	0.00 %	0	0.00 %	0	0.00 %	59	17.20 %	59	17.20 %
	Total	0	0.00 %	0	0.00 %	0	0.00 %	343	100.00 %	343	100.00 %

		Lister		Michener Park		Newton Place		East Campus (All other Residences, including Residence Saint-Jean)		Total	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
✖ Q77. How well does the UWS in the common areas of your residence meet your needs?	Completely	0	0.00 %	0	0.00 %	0	0.00 %	27	7.63 %	27	7.63 %
	Mostly	0	0.00 %	0	0.00 %	0	0.00 %	93	26.27 %	93	26.27 %
	Somewhat	0	0.00 %	0	0.00 %	0	0.00 %	102	28.81 %	102	28.81 %
	Slightly	0	0.00 %	0	0.00 %	0	0.00 %	85	24.01 %	85	24.01 %
	Not at all	0	0.00 %	0	0.00 %	0	0.00 %	47	13.28 %	47	13.28 %
	Total	0	0.00 %	0	0.00 %	0	0.00 %	354	100.00 %	354	100.00 %
✖ Q78. How well does the UWS available in your room meet your needs?	Completely	0	0.00 %	0	0.00 %	0	0.00 %	27	7.63 %	27	7.63 %
	Mostly	0	0.00 %	0	0.00 %	0	0.00 %	76	21.47 %	76	21.47 %
	Somewhat	0	0.00 %	0	0.00 %	0	0.00 %	74	20.90 %	74	20.90 %
	Slightly	0	0.00 %	0	0.00 %	0	0.00 %	94	26.55 %	94	26.55 %
	Not at all	0	0.00 %	0	0.00 %	0	0.00 %	83	23.45 %	83	23.45 %
	Total	0	0.00 %	0	0.00 %	0	0.00 %	354	100.00 %	354	100.00 %
✖ Q79. How many devices do you have that connect to UWS?	None	0	0.00 %	0	0.00 %	0	0.00 %	8	2.26 %	8	2.26 %
	1 - 2	0	0.00 %	0	0.00 %	0	0.00 %	243	68.64 %	243	68.64 %
	3 - 4	0	0.00 %	0	0.00 %	0	0.00 %	94	26.55 %	94	26.55 %
	More than 4 devices	0	0.00 %	0	0.00 %	0	0.00 %	9	2.54 %	9	2.54 %
	Total	0	0.00 %	0	0.00 %	0	0.00 %	354	100.00 %	354	100.00 %

		Lister		Michener Park		Newton Place		East Campus (All other Residences, including Residence Saint-Jean)		Total	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
✖ Q81. What types of devices do you use to connect to UWS? (Select all that apply)	Cell Phone	0	0.00 %	0	0.00 %	0	0.00 %	347	43.16 %	347	43.16 %
	Desktop Computer	0	0.00 %	0	0.00 %	0	0.00 %	26	3.23 %	26	3.23 %
	Laptop Computer	0	0.00 %	0	0.00 %	0	0.00 %	335	41.67 %	335	41.67 %
	Tablet	0	0.00 %	0	0.00 %	0	0.00 %	77	9.58 %	77	9.58 %
	Television	0	0.00 %	0	0.00 %	0	0.00 %	8	1.00 %	8	1.00 %
	Gaming System	0	0.00 %	0	0.00 %	0	0.00 %	7	0.87 %	7	0.87 %
	Other (please specify)	0	0.00 %	0	0.00 %	0	0.00 %	4	0.50 %	4	0.50 %
	Total	0	0.00 %	0	0.00 %	0	0.00 %	804	100.00 %	804	100.00 %

		Lister		Michener Park		Newton Place		East Campus (All other Residences, including Residence Saint-Jean)		Total	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
✖ Q83. How well does your internet meet your needs?	Completely	0	0.00 %	0	0.00 %	0	0.00 %	15	36.59 %	15	36.59 %
	Mostly	0	0.00 %	0	0.00 %	0	0.00 %	11	26.83 %	11	26.83 %
	Somewhat	0	0.00 %	0	0.00 %	0	0.00 %	2	4.88 %	2	4.88 %
	Slightly	0	0.00 %	0	0.00 %	0	0.00 %	10	24.39 %	10	24.39 %
	Not at all	0	0.00 %	0	0.00 %	0	0.00 %	3	7.32 %	3	7.32 %
	Total	0	0.00 %	0	0.00 %	0	0.00 %	41	100.00 %	41	100.00 %

Due to the changes in data visualization and presentation, we are able to review the results for second to fourth year of study in one view. For the 2017/18 academic term, when students were asked whether their ability to meet people has been enhanced by living in residence, 26.21% felt it somewhat enhanced their ability to meet people. 25.26% felt that they slightly were better able to meet people as a result of living on campus, and 19.0% felt it hadn't impacted their ability to meet people at all (Campus Labs, 2018). When we compare this to the 2016/17 data the results are similar on the higher end; however, there is an increase in students feeling "not at all" like living on campus has helped them meet people. These types of comparisons allow Student Affairs professionals at the University of Alberta learn more about the student experience, and ask more questions in relation to these students' ability to build community. That said, we still don't explicitly ask these questions.

When it comes to upper-year undergraduate students well-being, 34.49% of respondents "somewhat agree" that someone in residence cares about their well-being, and this is the second highest answer on the scale. 28.12% feel neutrally about it, and 15.07% strongly agree that someone cares about their well-being (Campus Labs). Again, in comparison to 2016/17 data it is very comparable. There aren't any glaring differences between these two years and the responses of upper-year students. As for the survey question regarding students' need for assistance, 26.09% of all upper-year undergraduates somewhat agree that someone would notice if they needed assistance. 20.87% of students felt neutrally about it, and 23.19% strong disagree. What does this tell us about this community? The results are relatively equal across the scale on this question. So, again, if students are building thriving communities, *how* are they doing so? We cannot discern that from these survey questions alone.

The 2017/18 survey data shows us, when it comes to the sense of belonging to the institution, 31.78% of students somewhat feel a higher sense of belonging. 22.16% felt that their sense of belonging to the institution increased considerably, 17.20% felt no sense of belonging at all, followed closely by 16.03% of upper-year undergraduates demonstrating that living on campus has increased their sense of belonging by a great deal. Essentially, we don't know if students are building community simply by proximity to each other, shared interests, residence programming, etc. Further to that, we don't ask students if technology plays a role in their ability to build community on campus, we simply ask them in 2016/17 if their internet connection is satisfactory for them.

In 2017/18 Residence Services did ask students more questions about their internet use, as demonstrated by the survey data above. This demonstrates how the survey can be used to ask deeper, more targeted questions about the student experience, based on what the responses represent. Clearly there's a desire to better understand the provision of internet across the residence buildings at the University of Alberta, and in an effort to find out more about this specific phenomena, more technology-related questions were asked in the Student Satisfaction and Learning Survey in 2017/18 compared to previous years. The survey expanded on the line of questioning when it comes to internet usage on campus. Students were asked if the internet was satisfactory in the residence common areas. Naturally, this could be considered an area where students might build community and forge stronger bonds with their neighbors. 28.81% of upper-year undergraduates felt somewhat satisfied by the internet services. 26.27% felt mostly satisfied, while 24.01% felt only slightly satisfied (Campus Labs, 2018). When it comes to measuring student satisfaction with the connection in their unit/room, 26.55% felt slightly satisfied, 21.47% felt mostly satisfied, and 23.45% felt not at all satisfied with their internet

services within the walls of their unit or room. The overwhelming majority of upper-year undergraduate students, at 68.64%, are connecting 1-2 devices to the internet, while 26.53% of students are connecting 3-4 devices (Campus Labs, 2018). Further to that, 43.16% are connecting with their cellphones, 41.67% are connecting via a laptop, and only 9.58% are connecting a tablet to the internet services. This "deeper dive" into the provision of internet services tells us that generally, no matter where students are living, they are slightly to somewhat satisfied with their internet connectivity. We know they are connecting multiple devices and using the internet for various activities. Thus, 36.59% of upper-year undergraduates are completely satisfied with their internet connection while living on campus, and only 7.32% are not at all satisfied.

The rich results of this data helped shape Phase 2 of this study, the interview process. Since upper-year undergraduate students from both data sets felt strongly that living on campus helped them meet people, feel accepted by other students, and contributed to a sense of belonging to the institution, we can deduce that the communities are thriving. What we don't know is *why* or *how*. Why do students feel accepted? What activities facilitated community building, and a sense of acceptance among their peers?

We don't really know whether students feel a sense of belonging to the institution because of something that we can improve upon, or if simply living on campus makes them feel connected to something greater. It is interesting to note that though students feel all of this connection, they still were relatively unsure when it came to the question of someone noticing if they needed assistance. Is that not the very definition of being part of something greater than oneself? Why does that response garner a neutral result? Further to that, we understand the least

about this population than any other on campus, largely because we make too many assumptions about the needs of this upper-year community.

Phase 2: Interview Data

As part of the recruitment process, participants were asked to complete a pre-interview questionnaire (Appendix C), where they provided some basic demographic information about themselves as well as a summary of the types of ICTs that they engage with while on campus. 100% of respondents indicated that they use social media while living on campus (ex: Facebook, Instagram, SnapChat), while 85.7% indicated that they use mobile applications like their UAlberta app or their Residence Account. 28.6% indicated that they use video gaming devices, like Xbox or online gaming, and 71.4% indicated that they use social message-board websites like Reddit, chatrooms, or blogs (Hurlburt, 2018).
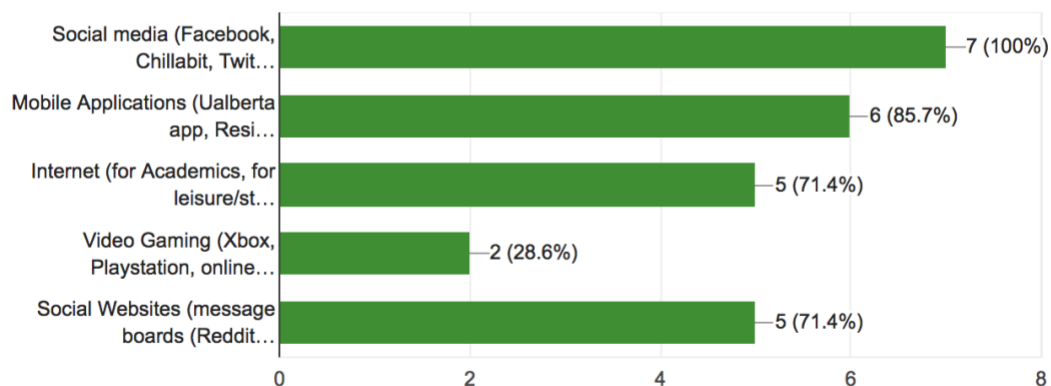
Figure 3: ICT use among upper-year undergraduate participants

These results helped to guide the interviews in terms of focusing on social media as the primary ICT identified by the sample population that they are engaging with the most. Participants were then invited to an in-person interview where they were asked a series of semi-structured interview questions (Appendix D), and the interviews ranged from 15 to 25 minutes. Participants were both male and female, lived in various buildings on East Campus at the University of Alberta, and were both international and domestic.

Year of Study	Residence Building (East Campus)	Demographic	Gender
Third Year	HUB Mall	International	Female
Second Year	HUB Mall	Domestic	Female
Third Year	Alder House	Domestic	Female
Third Year	Maple House	Domestic	Female
Fourth Year	HUB Mall	International	Male
Second Year	Tamarack House	International	Female
Second Year	Maple House	Domestic	Male

Table 2: Participant demographic data summary

Coding & Analysis

All 9 interviews were audio recorded and then transcribed for the purposes of analysis. Once the interviews were transcribed, I listened to each recording and wrote down common phrases, words, and reviewed my notes and observations that I took during the interviews themselves. Copies of these notes and the coding process are detailed in Appendix E After listening to all of the interviews and transcribing codes, the interviews were listened to a third and fourth time, where tallies were done on all the codes. A tally sheet was then created to determine themes from the data set, which were analyzed further through qualitative description. After coding and analysis was complete, 4 key themes emerged from the data in relation to the research questions. Those themes are discussed in detail in the discussion section of this paper,

and they include: Defining Community, Location & Style of Residence Building, Creating

Connections, and Social Media & Building Community.

Figure 4: common words and phrases from the analysis

Defining Community

It became clear through the analysis of the interviews that students were very cognizant

of the process of "building community" and what that would mean in regards to their personal

experience—and that we would first need to define their community before we could find out

what activities would help build that community and foster engagement. Some of the participants

had been living on campus throughout their university experience, beginning in their first year of

study. These students were keenly aware of the fundamental differences between the "first-year" experience and the "upper-year" experience when it comes to building their networks on campus. Students began to define their "upper-year" community, using words such as: mature, serious, studious, study focused, and private.

These characteristics are important to consider in reference to my second Research Question *"***RQ2:** Does the use of social media while living on campus facilitate student outcomes related to community building and engagement*?"* (Hurlburt, 2017) because "community building" for upper-year undergraduates is going to look different in comparison to other populations. This is essentially why the students had to meet specific criteria in order to participate, as it addresses a gap in the current literature. Since most research focuses on the first-year population, it is significant to note that the needs of upper-years are going to be different, and need to be defined in terms of how they build community. Given the words that the participants were using to describe themselves, it is not surprising that they also expressed difficulty in connecting with others. Participants felt that the needs for an upper-year student can often conflict with the outcome of community-building, because they are at a point in their studies where they are more focused on their academics, and less focused on "meeting people."

Take for example what this second-year student, living in a single bedroom in Alder House on East Campus, had to say about meeting people:

When I moved here, I literally knew nobody, so I was really eager to make friends in my building, and then, that eagerness went away when I was so busy with school. I was like, 'I really don't have time.' I haven't really connected with too many people outside of the

building, either, except in law school. I'm just really busy with studying, so I'm not really

offended…everyone is crazy busy (Personal Communication, 2018).

Other participants echoed this expression of being busy, studious, and mature, and a

definition for the upper-year community began to form. Students also expressed that meeting

people and creating a sense of community is challenging because of the level of maturity of the

group. They felt that "friend groups" were already established from previous years, and less

effort had to be made to create a sense of community or to create strong bonds with other people

on campus. Alternatively, participants expressed that they would meet people through class or

clubs, and that crossing paths with people in residence was not something that was reliable or

would happen frequently. Some students had created social groups both online and in-person,

some did not feel the "need" to connect with people on a regular basis. For most participants it

came down to a level of effort—but ultimately they all felt that taking a break from studies and

connecting with people was still important—but perhaps not a priority. A third-year student

living in a studio apartment on East Campus, when asked about the "need" for community

building for upper-year students, said:

It's a lot more mature. People, I feel like, just have different goals there [East Campus].

People are very studious. Even working as an RA in HUB, I would do my check-ins, and

I would always find people studying a lot. I found that people are a lot more studious

because it's upper-year, so people take school a bit more serious. I'm not saying that in

Lister [first-year community], I didn't meet people who are serious about school, but I'm

saying there's a bit of a difference. It makes sense in upper years, that people take their

studies more seriously (Personal Communication, 2018).

Creating community bonds and connections with others becomes secondary or even tertiary by nature for upper-year undergraduates, so when we begin discussing the role of technology—specifically social media—it also plays a very particular role in regards to community building. This is in reference to my first Research Question: "**RQ1**: How are upper-year undergraduate students living on campus at the University of Alberta using social media?" (Hurlburt, 2018) because students are naturally going to have a different relationship with the technology they are using to build community than other populations on campus. This theme is expanded on in the "Social Media & Building Community" section.

Location & Style of Residence Building

Once students outlined what "community" meant to them, being in a more mature phase of life, and more focused on academics, the participants began to discuss their physical location and how it impacts their ability to build community. Most students that were interviewed happened to live in HUB Mall, which is a residence that houses approximately 800 students during the academic term, in studio, one, two, and four bedroom apartments. These students are primarily upper-year undergraduates, and HUB is centrally located on campus. It's close to the LRT transit system, central to most academic buildings, and is a short walk to convenient amenities. Every student from HUB mentioned a key feature about the building that in their view, impacts their ability to network and connect with other residents in the building: the stairwells.

Figure 5: HUB Mall Residence at the University of Alberta and a sample floor plan

In an effort to describe the challenges associated with the stairwells, a fourth-year student living in HUB said:

In HUB it's really, really difficult to meet people because it's not like Lister, which is a dorm style. HUB works with stairwells and so it's really difficult to meet your neighbours upstairs or downstairs. You don't have anyone living in front of you or next to you, so the only people you meet is your roommate—if you have roommates (Personal Communication, 2018).

Another second-year student living in HUB echoed the difficulty regarding the stairwells, saying that:

You don't have to socialize in HUB except for with your own roommates. Even then, that's only two to three other people…it's the building HUB itself. There's stairwells.

There's not even common hallways, there's the middle hallway, but those aren't necessarily in the residences. Whereas the other places like Tamarack House and Linden House, they have hallways so at least you're passing other people in your building. Whereas in HUB, it's a stairwell so you might pass maybe one person (Personal Communication, 2018).

Clearly the layout of the building impacts upper-year students' ability to make connections with other students, just by crossing paths with them. All three students interviewed who live in HUB noted how challenging it is to meet people and create lasting bonds, partly due to the way the building is designed, noting that if one did not want to, they did not have to interact with a single person on any given day if they did not wish to. These results reaffirm how community-building activities are more fluid and seamless in a first-year community, where the building style lends itself to purposeful networking opportunities. Every student that was interviewed that lived in a first-year community (Lister) before transitioning to an upper-year community, noted how much simpler it was to meet people, make connections, and to sustain those connections over time, simply due to the building style, layout, and design. Take for example this statement from another upper-year undergraduate living in HUB, "Building community, for sure, it's easier in Lister than in HUB because of the style of the building" (Personal Communication, 2018).

Events & Programming

A second-year law student noted that her RA promised "community-building" events to her early in the academic term, but when it came down to it, the interactions never really took place—at least not in a way where she felt that a sense of community was being created in her building. She said that:

I maybe had one or two encounters with more that one person in the same room from my building, and it's usually the first meeting of the whole year. After that, there's just radio silence, basically. I haven't had too many opportunities to cross paths with people, I live in a walk-up, like a townhouse. At those group meetings, maybe 8 to 10 people show up, out of my whole building. That's the maximum number of people I ever see. So there's like 75% to 85% of the building that I have never even met before (Personal Communication, 2018).

This students' experience outlines a common one in the East Campus community, that there's a desire to connect, but the physical pathways aren't conducive to traditional forms of community building. A second-year student that lives in Tamarack House said that, from her previous experience living in HUB:

I think for building community, Lister is a better place because you live in a dorm-style building, you have floor meetings, you have floor events, and dodgeball. That kind of helps you to meet your community in a better way. But then, I think at one point of time you need to go to some private place and I think HUB fulfills that. I think one year is good enough time for you to build your community. You don't get to know people too much as compared to Lister in HUB, but still, I have some of my friends from Lister who are living in HUB, so it's kind of fine (Personal Communication, 2018).

As this student notes, though community building is easier in Lister, upper-year students eventually need to move on and find more mature, independent, private living situations while they finish their degree. Student Affairs professionals living in these buildings may be relying too heavily on the fact that upper-year students want privacy, and are less likely to promote a sense of community, considering these students are study-focused and serious about their

academics. Though this is true and this is how the community defines itself, almost every student still mentioned that they had an expectation to connect with people more, build stronger networks, and have more face-to-face interactions that has remained unfulfilled. This sentiment is captured by a fourth-year student living in HUB, when he said:

> The building style is really independent. I knew that when I came to Canada. I knew that I don't want to share a washroom. I don't want to share a kitchen. I wanted the stuff for myself so that's why I applied for HUB, besides the price, which is the cheapest residence on campus. I wanted my own washroom, my own kitchen. I wanted to do stuff by myself. I also wanted to connect with people. I was expecting people to come up to the programs but it didn't happen (Personal Communication, 2018).

This building layout isn't entirely a disadvantage though, given that these students have already identified themselves as studious, serious, and academically focused. What seems to be missing is a balance between privacy and isolation, between taking a break from academics and fostering a sense of community with their peers.

This is where the interview questions began to explore the role of social media in building community. Could social media act as the bridge needed to connect people, in a place where connections may not happen as frequent or naturally? Participants indicated that social media was a good first step for initial contact, that it could help build trust with peers, and allow students to observe from a distance and decide what level of effort they wanted to give to any given situation or community event.

Creating Connections

Now that students defined their community and outlined the challenges around the building styles on East Campus, the next theme revealed in the data is the concept of creating connections within these communities, despite the demonstrated challenges. One student, in her third-year of study living in Maple House, simply feels it comes down to an individual's level of effort:

> I would say if you make the effort to do so [build community] it's not as difficult. For example, like you attend events that are put on by your RA, I found that the events really do build the community, so I feel like if you attend those, you take advantage of them, meet a lot of people. I feel like it's the amount of effort you put in, that's what it comes down to. Because in Lister it's a bit easier because you're just on the floor and it's just easier to meet people naturally, but there it's dorms. Here, it's secluded so much more, but if you make the effort I feel like you-- I definitely met some really good friends out there (Personal Communication, 2018).

For this student, even though it was "easier" to build community in a first-year building, she still felt that the concept itself is dependent on how much effort a person was willing to bring to the situation. I then asked the participants how they are meeting people and building their networks while living on campus, despite the challenges of living in a more independent community. Students referenced events and programs in residence, clubs and groups that they are connected to through student associations and their student union, and just basic activities in their friend groups, like going to the movies or out to restaurants or bars in the city. Students also mentioned meeting people through their classes and working on assignments through group projects in various locations across campus. Several students interviewed decided to become

RAs in their communities, in order to create more connections and get more involved in their communities. Take for example this student, who is a fourth-year living in HUB:

> I had the apartment for myself but sometimes I felt lonely. I didn't have anyone to talk to so as a resident in HUB it's really, really difficult to connect with people. Now that I'm an RA in HUB for the past year it's better. You get to know the residents in the community in the area that you are overseeing. You also get the chance to work with the RA team in HUB and meet more people and make friends with them (Personal Communication, 2018).

He found that becoming an RA put him in a position where he could meet like-minded student leaders and meet more people in general. Considering the building he lives in houses an average of 800 residents, becoming active in the community might be perceived as not that difficult from an outside perspective, given the density of the population in the building. But, even in a community where you have a critical mass of students of the same or similar year of study, creating connections isn't always so simple. Even as an RA, this student recognizes the difficulty of getting students to come out of their private, more isolated apartments, and the challenges associated with encouraging them to join in community programming.

Another participant, who lived in HUB but now resides in Tamarack House, echoes the challenges facing upper-year communities, and also highlights the concept regarding individual students' level of effort:

> The person that creates the group has to constantly be encouraging people to be connecting, to keep the group lively and active, because some groups are just always quiet and nobody really talks, so that will still be awkward like you don't really know

each other and nobody is talking to each other. I feel the person that creates the group

[RA] is meant to keep on asking questions and talking and bringing conversations so

people actually get to start talking and continue to meet with each other (Personal

Communication, 2018).

The mature nature of the community perhaps allows for more distance when it comes to

creating community bonds. Everyone is in the same boat so to speak, so there's a general level of

acceptance when it comes to people in the community being busy studying, or having a more

independent experience—there isn't as much of a community drive to get every single person

outside of their apartment and into the community. One way these upper-year students are

connecting is to observe from a distance, and choosing which activities they want to participate

in, and this can be achieved effectively through the use of social media. They are using these

platforms to observe and then participate digitally when they feel up to it. A third-year student

from HUB said that Facebook pages and group chats help her discover what is going on outside

of her apartment so that she can take a break from studying if she wants to:

Social media helps to get people informed on what's happening in the community, like

keeping everybody in the know. Because to have a good community you need

connections, and without anything else—because people can get lost in studying and stuff

like that, but with social media they have some way to know, 'Oh, there's stuff going

down, I can take a break,' and go and lounge, go talk to people, just to get people

knowing what's happening (Personal Communication, 2018).

These levels of participation are interesting because even though every student mentioned

how busy people are and how studious they are in the community, but they still have a strong

expectation to be able to make strong connections to that community, outside of academic settings. When it comes to creating these connections over social media, a third-year law student made a point about expectations around certain social media. When asked what social media platforms she uses to connect with her peers in residence and on campus, she said that it can be confusing and difficult to navigate. "It's hard. Everyone is on dating apps these days and 'Why is it taboo to make friends through social media, if you can make relationships?' I don't know, it feels like making friends online isn't okay, compared to having a Tinder profile" (Personal Communication, 2018). So, depending on where a student sees themselves in the community, creating connections at different levels is really dependent on their level of effort, and interest in doing so. All of the participants did indicate that they are using various social media platforms to build connections with their community, which brings us to our final theme derived from the data.

Social Media & Building Community

All seven participants answered "yes" to whether they think social media can facilitate community-building while living on campus at the University of Alberta as an upper-year student. Participants were insistent that social media could never replace face-to-face, in-person interactions, but it could be a place for students in this type of community to begin to feel comfortable with one another. As one participant put it, a second-year law student who lives in Alder House, "I think social media could be used as the starting point, but I think that you would need to meet someone in person to figure out if you can actually connect with them" (Personal Communication, 2018). Every participant in the study indicated that they use social media to connect with other people living on campus, and they use it as a tool for community building, but that they don't rely on it entirely. Another participant said, "…social media is like the second

alternative, but I think meeting face-to-face gives a stronger sense of community and bond at the end of the day" (Personal Communication, 2018). There was an overwhelming consensus from all participants that social media played an initiation role, acting more like a bridge to the real community building that takes place when people meet face-to-face.

All of the participants also indicated that there were other benefits to using social media as a starting point, because it allows them to join groups at their own pace. The platforms that these students are electing to be on to build their networks is also important here, each one has a specific use for the type of relationship that they would like to build. One student mentioned how to her, Instagram was more personal, so if she did not know someone at a deeper level, she would only be their Facebook friend. If the friendship or connection grew from there, she would be more comfortable adding them on Instagram or Snapchat. Another student noted that they preferred Facebook in all circumstances, and could really do without Instagram or Snapchat, so there's definitely a preference at play as well. Despite this, every single participant did mention Facebook as their number one means to connect for the purpose of community building on campus.

A majority of Facebook, Snapchat and Instagram users visit these platforms on a daily basis

Among U.S. adults who say they use ___, the % who use each site ...

	Several times a day	About once a day	Less often	NET Daily
Facebook	51%	23%	26%	74%
Snapchat	49	14	36	63
Instagram	38	22	39	60
Twitter	26	20	53	46
YouTube	29	17	55	45
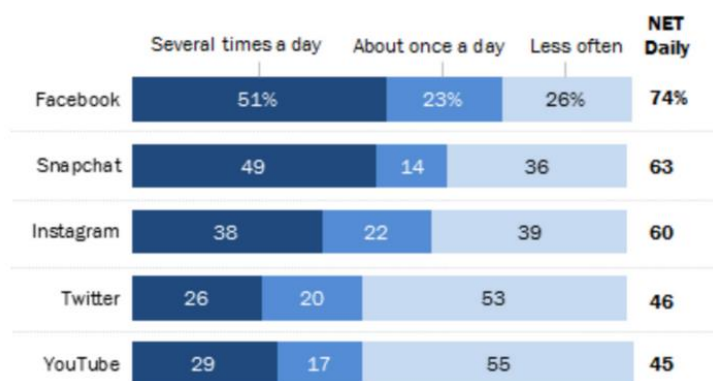
Note: Respondents who did not give answer are not shown. "Less often" category includes users who visit these sites a few times a week, every few weeks or less often.
Source: Survey conducted Jan. 3-10, 2018.
"Social Media Use in 2018"

PEW RESEARCH CENTER

As noted earlier, 100% of participants indicated that they are using some form of social media in the pre-interview questionnaire, which pre-empted the focus of this study to be on social media,

Figure 6: Pew Research daily social media figures (2018)

rather than various other ICTs. Texting and emails were both mentioned as useful means of communication, but when it comes to the outcome of community building and engagement, the participants referenced social media above anything else. In terms of platforms, each participant mentioned the use of Facebook as their primary source for creating connections. This outcome aligns considerably with a recent Pew Research Survey of adults in the U.S., where 68% are on Facebook daily (Pew Research Centre, 2018). 78% of young adults aged 18-24 (which fits the sample population age range for this study) are using Snapchat and 71% are using Instagram, which also aligns with the habits of the participants of this study. In fact, Facebook, Snapchat, and Instagram are being used on a daily basis, and Instagram and Snapchat are becoming increasingly popular among the 18-24 year old age range.
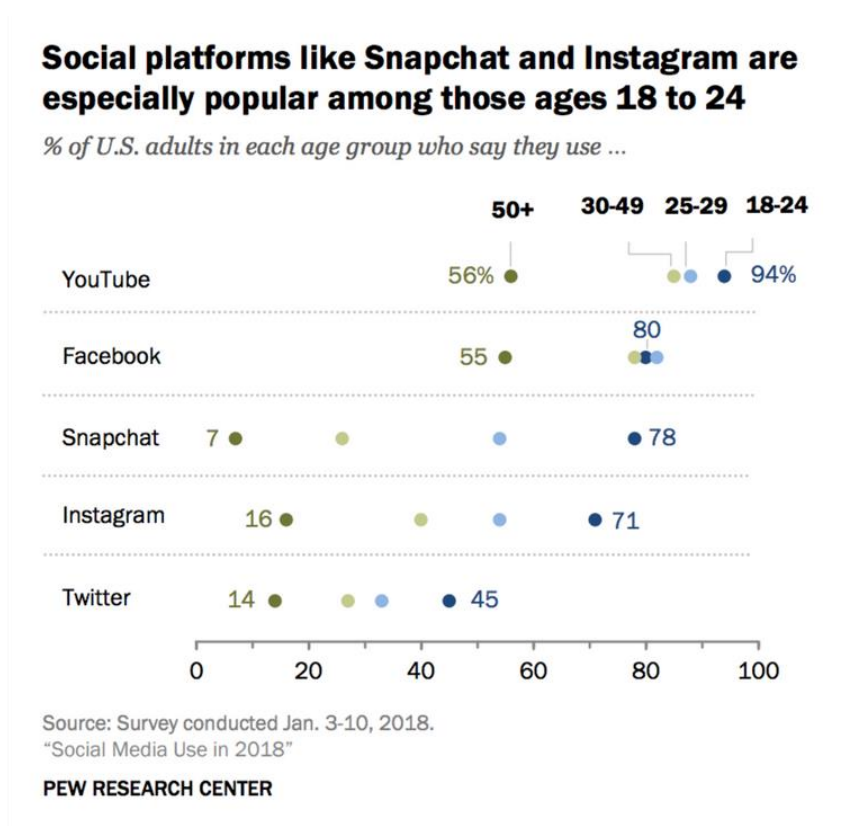
Figure 7: Pew Research social media platform use (2018)

One participant demonstrates the validity of the Pew Research regarding platform use among 18 to 24 year olds:

In law school we have class Facebook pages, and we are able to communicate with each other about different events that are going on. And that's basically the only reason I have Facebook, is to make sure I'm up to date with different activities that are going around the school. There's closures around the school, and people post about it there. I think there is one for Alder House but it's not used. I think that it could be used in a better way, to connect people, I'm not sure exactly how, but it would be nice to see familiar faces on Facebook, even. If friendships could be made through that, and you are in the same building, it's not like you're strangers (Personal Communication, 2018).

More than any other platform, all participants in the study cited Facebook pages, groups, friending people on Facebook, and the use of Facebook Messenger as the best way to connect with their peers. They said that using Facebook was easy, convenient, and that "everyone" has it, so it made making that first connection easier. Or, they noted that if they weren't quite ready to be friends, they could still communicate in messenger and in group chats. A participant from Tamarck House explains it as, "First, add me on Facebook, and then when you're like best friends or something you can follow me on Instagram, follow me on Twitter" (Personal Communication, 2018).

I created Figure 7 below to represent how students rank the social media platforms that they are choosing to use to build networks as a result of living on campus. Facebook is the introductory platform for everyone, as well as a place to create groups and events. Instagram demonstrated a deeper level of friendship or connection, but was rarely the first point of connection for this group of students. Snap Chat was the platform that this group unanimously could do without, and students referenced how it acted as a space to observe rather than participate.

Level 1: Facebook. Create Connections, Friend others, make plans.

Level 2: Instagram. Deep relationships, watch stories, visual.

Level 3: SnapChat. Could do without, observe from a distance.

Figure 8: social media use among upper-year undergraduates

A fourth-year in HUB said it succinctly, when referring to why he uses social media to build increase his social integration "…it's convenient, fast. It gets you, right away, to connect with that person in seconds" (Personal Communication, 2018). Facebook also helps with the challenges related to the layout of the buildings. Participants noted that it might not be convenient to meet up with people, and that some of those basic communications are easier over social media like Facebook. Participants that are active student leaders also noted how using the

platform helps them remind students to come out of the isolation in their rooms and join in community-building events. The same fourth-year from HUB said that:

> It [Facebook] helps connect people. There's a lot of people in that group so we have to post whatever program we're organizing, we post it in advance so people can get to know what's going on or what will happen in certain day and they can just show up if they have the time. It helps me a lot when I'm organizing my programs to use the Facebook group (Personal Communication, 2018).

When the participants were asked which platforms they could do without, the ones that did not assist them in building community on campus, the answers were varied, though there was agreement on one platform overall. Firstly, every participant said they could drop Twitter without a second thought (if they were using it), and that the platform was used more for news or real-time information—not bridging connections in a community. None of the participants said they would get rid of Facebook, but the split enters the picture between Instagram and Snap Chat. Participants noted that the "story" feature was basically the same and was used more for observing than actually connecting with people; however if they had to choose, students said that they would drop Snap Chat before Instagram. The reason Facebook was the top platform was because it works the best for an expressed purpose: connecting people. Facebook use among young adults has been dropping recently, according to the Pew Research Survey, but that actually aligns with this data, because students aren't really using Facebook in their "real" lives. They are using it for class, to connect with groups, and to make plans. They are using it to connect with people in-person rather than building community online. A participant from Tamarack House said that Facebook is the "major platform" to know "things are happening", she said:

Because all events that are happening in residence, I get to know about by their Facebook pages or event pages. All the events or whatever things are happening is through social media. For example, I came to know about your research through social media only. It's the major platform where you get to know about whatever things are happening (Personal Communication, 2018).

Participants also expressed that social media is a less invasive way to do welfare checks on their friends, and approach them if they see they are struggling, without making them feel pressured in person. A second-year from Maple House said:

To have a good community you need connections, because people can get lost in studying and stuff like that, but having some way to know, 'Oh, there's stuff going down, I can take a break,' and go and lounge, go talk to people, just to get people knowing what's happening—yes, because they don't know anything that's going on outside of their room, unless I send out a Facebook message, they have no idea what's going down (Personal Communication, 2018).

Based on this data, students are using social media as a way to coax students out of their academic-focused behaviour, making sure that they make time for social connections and community engagement. Another participant, a second-year from HUB said:

If for example, you have a resident who you haven't seen around and maybe you're concerned. They're more comfortable, too, instead you come knocking on their door and be like, "They're still alive." You can Facebook message them when you're like, 'Hey,

how are you doing?' I feel like it's just a better approach to that (Personal

Communication, 2018).

Ultimately, social media is a tool that participants from this target population are using to

help facilitate their ability to build strong bonds and a stronger sense of community.

Discussion

Overall, it is clear that many factors contribute to student satisfaction and persistence in

residence, and the importance and relevance of each factor is dependent on each individual

institution and the needs of its students. This research is important not only to the University of

Alberta, but also to other institutions that may wish to understand the challenges associated with

ICTs as a facilitation tool to promote community-building and engagement. The positive student

outcome of building community and engagement is extremely important, and the adoption of

certain ICTs over others can give us insight into these impacts, and hopefully we can improve

the student experience of living on campus because of it.

Theoretical Connections

It is clear through the analysis of the participant interviews that there is a palpable

expectation from upper-year undergraduates that they will build a strong sense of community as

a result of living on campus. These students also expressed the need to build this community at a

slower pace, perhaps even at a distance, and that social media allows them to do so. A level of

use and dependency on technology is required in order to achieve this outcome of building a

strong sense of community, a finding which aligns with the current research on this subject. As

noted throughout this paper, college students are among the heaviest users of the internet

globally (Morahan-Martin et al., 2000), and this study supports that fact.

My study leads us to explore the factors motivating students to use social media to build their community and personal networks. This finding is supported by existing research on Uses and Gratifications Theory. The communication function of social media in the context I studied is a clear method of need-fulfillment. Students in my sample population note that social media allows them to form bonds with their peers at their own pace, and it also allows for them to have an immediate, instant response if required. There is a gratification of both an immediate response through the ability for students to practice social integration through these platforms, and the gratification of one's paced, controlled integration into a community of their choosing. In *"College student motives for chatting on ICQ,"* author Louis Leung (2001) explores what motivates college students to use a specific information technology. Leung delves into how computer-mediated communication is a technological development that has social and emotional outcomes for the users of such technology. That study illustrated the gratifications for using these types of technology, demonstrating an emergent spectrum of ICTs that support community development and drive social ties in university residence communities. These same phenomena can be confirmed through my study, as the participants are using social media to support community development on their own terms. Further, Uses and Gratifications theory hypothesizes that "self-motivated audiences actively seek gratifications from various media" (Blumer, 1979), which is also the case here, as illustrated in my pre-interview survey and the responses of my interview participants.

It is important to note the differences I found between the motivations and gratifications of first-year students entering the residence system, and upper-year students. Through a blend of quantitative analysis (Residence Satisfaction Surveys) and the qualitative data I analyzed in this study, there is a clear need for students to define their own community before discussing what

activities contribute to their ability to foster a sense of community on campus. In "*Living Learning Communities and Students' Sense of Community and Belonging*" by Aber et al. (2013), first year students develop a sense of community primarily through a higher sense of academic efficacy, while upper-year students develop a sense of community through a development of self-worth, which can be related to nurturing strong emotional connections, including those derived from their community. Again, there is little research on upper-year students, allowing my study to contribute rich qualitative data to help demonstrate the distinct needs of these students – needs that are outside of the definition created for first-year students or "undergraduate students" more broadly.

The Student Integration Model plays a role in my findings as well. We now know more about the specific needs of this upper-year community of undergraduates, and how developing connections through the various social systems that students belong to impacts their ability to demonstrate the positive outcome of community building. Cheng (2004) found that students' sense of community is derived from their ability to feel valued and to make positive social connections on their campus. Upper-year undergraduates living on campus at the University of Alberta clearly demonstrate the need to create positive social connections, though they are hindered in some ways. This is evident through the challenges associated with the building design of some of the residence facilities on East Campus, and the mature nature of the communities. There also seems to be a challenge for some students to transition into peer-to-peer activities and programming on campus, citing difficulties related to the pressures of their academics and again the layout of the residence facilities. Thus, students in this population are using specific social media platforms to attempt to bridge the gap left by physical space, in an effort to build stronger community bonds.

Facebook proved to be the primary platform used by all participants in the study as the platform of choice for building community on campus. The use of Facebook could be explained by the maturation of the community, as participants discussed specific uses of the platform, through Facebook Pages and Groups, over the gratification of instant messaging through Facebook Messenger. Facebook allows for students to plan to meet face-to-face, where each participant stressed: social media could be used as a first step to community building, but face-to-face interaction has to occur to build strong bonds overall.

Limitations

There were several sub-themes that did not pick as much traction with the participants, but have the potential to add further validity to the study. As such these themes are considered a weakness as there are limited resources available to continue data collection on this topic, given the duration of this study. Some of the participants talked about the concept of "false connections" and "boundaries," which did not gain as much traction with other participants. One third-year undergraduate student living in Maple House said that as an RA when she was thinking about how to make connections with her community:

> I was thinking of doing a Facebook page, but I ended up not pulling through with it because I just did not have as many people from the zone on my Facebook, so I wasn't sure if—I did not want to push that boundary sometimes. I told people if they want to add me, they can add me on Facebook, but sometimes I understand people choose not to do it (Personal Communication, 2018).

When asked to expand on the concept of boundaries she added that social media houses personal information that people may not want to share with others in the name of community

building. She said that befriending other residents or students on campus on social media is "opening up to your life, through your Facebook page. You can have information like pictures, photos of your life, and that can be sensitive. If people don't want to share that, that's fine (Personal Communication, 2018).

There's also the concept of false friendships, or a false sense of connection, as a result of social media adoption. Two participants in the study noted that social media can be a place where people think they are connected, but really aren't. They outlined how having a certain number of friends on social media wasn't really a reflection of a person's authentic community or friend group. One of those students said that:

> Even adding people on Instagram or Snapchat, it's a good way to stay connected. Even though sometimes you think you're connected to people but you're not actually connected. Maybe you met somebody a year ago, and you haven't talked to them in a year, but you still feel you may be still connected because you think you know what's going on in their life by a picture or two every month, which is deceiving to me about Instagram—or not just Instagram. It could be any social platform because you feel like you're connected to somebody, but you're actually might not be as connected at all (Personal Communication, 2018).

This false sense of community may or may not contribute to how students perceive their ability to build community while living on campus, and those results could be explored in a deeper way. The other student who mentioned this phenomena, said that, "People have thousands of friends on Facebook, but you're not friends with everybody. You're friends with probably 10 or 20 of them in reality" (Personal Communication, 2018) so there's definitely potential for

social media to build false community for upper-year undergraduates living in residence at the University of Alberta.

Students also mentioned using social media as a means to connect with communities at a distance, so essentially, connecting with people from other cities, groups, etc. All three international students mentioned missing people from home, and using ICTs as a means to connect with them, including social media. A third-year student living in HUB said, "My first four months was kind of hard because I missed my family. Now, I'm pretty settled down here. I think that's because of the community I've built and all the activities I've indulged in" (Personal Communication, 2018) and she mentioned that the primary way she stays connected with her family is through the application What'sApp. Another student, who has lived overseas, but is from Toronto, said that:

> WhatsApp is like—I've noticed here in Canada people don't use WhatsApp a lot. It's mostly to talk with my friends back home and my family. I use Instagram, to keep connected, for example with people that don't live in the same city. I'm from Toronto actually, so it's nice to know what other people are doing, what's going on, so you feel connected in a way. There's definitely a reason for each, same with Snapchat (Personal Communication, 2018).

An international student from HUB echoed this same technique, using ICTs to maintain connections with peers once the in-person connection is broken or disturbed:

> When you live in HUB you meet people from all over the world. When they go back home, social media helps you to stay connected with them, but still, I have friends from all over the world and we're organizing this trip next year to Korea. None of us have the

money! We don't know where we are going to do it, but we're going to Korea somehow

because we still need to see each other. We still need that face-to-face interaction

(Personal Communication, 2018).

Clearly certain ICTs are used over others (What's App, texting, emails) for another type

of social connectivity, maintaining bonds over large distances. Students are staying connected

with friends and families in other countries and cities more easily through these ICTs. The

purpose of this study was to find out whether social media facilitates community building for

students living on campus, so it is out of scope to consider the other types of communities

(online, distance) that the sample population is fostering.

Conclusion

Going forward, and if this exploratory study is ever replicated, there will likely be

developments in regards to the specific needs of other types of student populations (i.e.:

international students, graduate students, etc.). Researchers might also consider how to

incorporate the anticipated changes in social media platforms and advancements in technology.

Given the pervasiveness of technology, there will no doubt be new and innovative technologies

to study when it comes to students living on campus. From this study, as a recommendation to

Student Affairs professionals at the University of Alberta, the primary finding is that social

media is used as a tool to help upper-year undergraduates build community, and there is a higher

expectation from this population to have assistance in building these communities. Though the

communities are serious and mature, they still need attention paid to facilitating community-

building and building that capacity within this population. These students want and need more

opportunities to build community, and social media can be used as a tool to facilitate this

process. The data from this study shows that Facebook is the primary social media platform used

to bridge the gaps in connecting upper-year students living on campus at the University of

Alberta, and therefore Student Affairs professionals should leverage this form of social media,

and use it to their advantage to increase these students' overall sense of belonging to the

institution.

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Appendix A

Participant Consent Form

INFORMATION LETTER and CONSENT FORM

Study Title: Living on Campus & Building Community through Social Media

Research Investigator:	**Academic Supervisor:**
Brittany Hurlburt	Dr. Rob McMahon
1-050 Lister Centre	2-365 Enterprise Square
University of Alberta	University of Alberta
Edmonton, AB, T6G 2H6	Edmonton, AB, T5J 4P6
bhurlbur@ualberta.ca	rdmcmaho@ualberta.ca
780.686.9700	780.248.1110

Background
You are being asked to participate in this study because you are an upper-year undergraduate living on campus at the University of Alberta. The results of this study will be used to support my capstone for completion of a Masters of Arts in Communication and Technology at the University of Alberta. Findings will be shared with Ancillary Services and may be submitted for publication.

Purpose
The purpose of my research is to understand whether the use of Information Communication Technologies (ICTs)—social media in particular—helps upper-year undergraduate students living on campus at the University of Alberta build community. Research on this topic focuses largely on "student outcomes." These outcomes are categorized as things like: higher GPAs, greater access to resources, higher rates of graduation, and the ability to build community and stronger personal networks. However, most of this research focuses on first-year students—there is a knowledge gap with regards to upper-level undergraduates. Through this research, I hope to learn more about how ICTs play a role in the outcome of building community for students living on campus, in relation to the population of upper-year undergraduate students.

Study Procedures
Students must be proficient in English and have been recruited to participate in the research via the Residence Services community newsletter, which was distributed to their UAlberta email account. Participants were required to fill out a short pre-interview questionnaire about their ICT use on campus, and were then scheduled for an in-person interview. Participants selected will receive a $10 gift card after completing the in-person interview. The researcher is restricting the interviews to eight (8) participants.

Please initial the boxes below:
- Data from the pre-interview questionnaire that was distributed via email will be used for screening and for the analysis portion of the study.
- Interviews will take approximately 30-45 minutes, depending on the participants answers, and will be conducted on North Campus at the University of Alberta.

- The interviews will be audio-recorded and transcribed. The Primary Investigator will also take notes from observations during the interview.
- Data from the interviews (audio-recordings, transcribed documents) will be retained by the Primary Investigator, will not be accessible by the public, and will be stored in a locked office, protected by encrypted computer passwords.

Benefits

The results of this research are entirely dependent on the participation of upper-year undergraduates living in residence at the University of Alberta. The intent is that the results will benefit current and incoming residents living on this campus because they will provide information for administration to help facilitate community building through information communication technologies. Students who participate will receive a $10 gift card as a "thank-you" for participating in this important work; however, there may be no other direct benefits. The results of the research will provide value to the existing research in this area of study, especially given that there are few studies that focus on the population of upper-year undergraduates, are based in Canadian institutions, and that focus on technology in relation to community building as a result of living on campus.

Student Affairs professionals will benefit from the results of the study by learning more about the specific interests and needs of different types of students living on campus. This supports the delivery of effective programming, facilitates positive experiences, and helps these professionals learn more about the students that choose to live on campus. The study will contribute to the research conducted in this area, providing insights into students' use of ICTs while living on campus, and whether the use of those ICTs helps them to build community and foster engagement. The study will both add to the research findings in this area, and contribute to efforts of the University of Alberta to provide a positive on campus living experience for residents.

Voluntary Participation

You are under no obligation to participate in this study, nor are you obliged to answer any specific questions even if participating in the study. You have the right to withdraw from the interview and choose not to participate. You are free to withdraw from the research study at any time without any adverse consequences, and you have the right to opt-out without penalty. You may request to withdraw any data collected for this study within 2 weeks of your interview, by contacting the researcher. If you choose to withdraw during the interview, you may do so verbally at any time. This will not affect your ability to receive the incentive. There are no known risks or personal benefits from participation in this study.

Confidentiality & Anonymity

All information collected will be coded to protect the participant's privacy, anonymity, and confidentiality. Before releasing information to the University of Alberta for any reason, all identifying indicators (names, student ID numbers) will be removed. The data collected will be kept in a secure place for a minimum of 5 years following the completion of the research project, and when appropriate, will be destroyed in a way that ensures privacy and confidentiality.

Further Information

If you have any further questions regarding this study, please do not hesitate to contact:
- Brittany Hurlburt, Primary Investigator at bhurlbur@ualberta.ca or 780.686.9700

- The plan for this study has been reviewed by a Research Ethics Board at the University of Alberta. If you have questions about your rights or how research should be conducted, you can call (780) 492-2615. This office is independent of the researchers.

Consent Statement

I have read this form and the research study has been explained to me. I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above and will receive a copy of this consent form, and I will receive a copy of this consent form after I sign it.

_____

_____   _____

Participant's Name (printed) and Signature   Date

_____

_____   _____

Person Obtaining Consent Name (printed) and Signature   Date

Appendix B

Information Sharing Agreement

This Agreement made this 25 day of April, 2018
For the AGREEMENT OF INFORMATION EXCHANGE BETWEEN
Brittany Hurlburt, "Primary Investigator"
And
Ancillary Services, "Residence Services"

Information collected and maintained by Ancillary Services (via Residence Operations), may be shared with Brittany Hurlburt in relation to research being conducted in fulfillment of a Masters of Arts in Communication and Technology at the University of Alberta.

This information may be shared with Brittany Hurlburt for the purpose of providing background for her study, regarding student satisfaction levels in relation to their living experience on campus at the University of Alberta. Ancillary Services retains the right to request information collected by Brittany Hurlburt for a period of up to 1 year. The data will be kept for 5 years as per University of Alberta ethics policies.

Ancillary Services will provide the Brittany Hurlburt with a data file containing the following data elements:
- Student.First Name
- Student.Last Name
- Student.ID Number (EMPLID)
- Facility.Full Name
- Condensed Data Reports, Skyfactor Mapworks (formerly Educational Benchmarking Inc.) from 2015-2018

The information will be provided by electronic file to Brittany Hurlburt. The data file will contain information on students who have lived in residence starting the fall 2015 to present (spring 2018). Brittany Hurlburt will only use the most recent records provided by Ancillary Services.

During the active use of the information, the file will be retained in a secure location whereby only authorized personnel will have access. The data will be protected by encrypted passwords and stored in a locked office.

Ancillary Services collects personal information under the authorities of the Universities Act, (in accordance with the provisions of the Freedom of Information and Protection of Privacy Act) and other legislative authority. The collection, use and sharing of this information is in compliance with Sections 33c, 34(1)(n), 34(2), 35, 38, 39(1)(a), 40(1)(l) and 40(1)(x) of the Freedom of information and Protection of Privacy Act.

Each party agrees to maintain their responsibilities in this Agreement. Each of the parties will give to the other party reasonable notice of any change in policy, regulations or statutes relating to their respective programs or services that is likely to affect this Agreement.

Principal Investigator	**Ancillary Services**
Brittany Hurlburt	Janice Johnson
Principal Investigator, MACT	Assistant Dean of Students, Residence
Faculty of Extension, University of Alberta	Ancillary Services, University of Alberta

Appendix C

Pre-Interview Questionnaire

Building Community through Social Media

This form should take less than 5 minutes to complete! You are filling out this form because you are interested in being interviewed regarding your use of information communication technologies (ICTs) as an upper-year undergrad and resident of East Campus. This interview is part of a research study for a Master of Arts in Communication & Technology at UAlberta. By participating in the study you will receive a $10 Starbucks gift-card as a thank you.

Your email address (**bhurlbur@ualberta.ca**) will be recorded when you submit this form. Not **bhurlbur**?
Sign out
* Required

1. **What year of study are you in? (you must be an upper-year undergrad)** *
   Mark only one oval.

   ( ) Second year

   ( ) Third year

   ( ) Other: _____

2. **What East Campus Residence do you live in?** *
   Mark only one oval.

   ( ) HUB Mall

   ( ) Tamarack House

   ( ) Pinecrest House

   ( ) Linden House

   ( ) Alder House

   ( ) International House

   ( ) Aspen House

   ( ) Maple House

   ( ) Peter Lougheed Hall

   ( ) Newton Place

3. **How long have you lived on campus?** *
   Mark only one oval.

   ( ) This academic term only

   ( ) Multiple terms in the same residence

   ( ) Multiple terms in more than one residence

4. **What ICTs (information communication technologies) do you use? (select all that apply)** *
   Check all that apply.

   ☐ Social media (Facebook, Chillabit, Twitter, Snapchat)

   ☐ Mobile Applications (Ualberta app, Residence Account)

   ☐ Internet (for Academics, for leisure/streaming)

   ☐ Video Gaming (Xbox, Playstation, online gaming, etc.)

   ☐ Social Websites (message boards (Reddit), chatrooms, blogs, eClass, etc)

   ☐ Other: _____

5. **Are you available for a short interview? (this is how you receive your $10 gift-card)** *
   Mark only one oval.

   ◯ Yes

   ◯ No

6. **Are you proficient in English?** *
   Mark only one oval.

   ◯ Yes

   ◯ No

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Appendix D

Interview Questions

UNIVERSITY OF ALBERTA

RESEARCH DESIGN
Interview Questions

Interview Questions
I will conduct semi-structured interviews, asking participants about their current usage of Information Communication Technologies (ICTs), specifically their use of social media as a means/tool to build community. Their responses may guide the questions, based on their individual experiences.

The questions are planned as follows:

Ask participant general discussion regarding the residence building they live in, basic questions about roommates, neighbours, and community in general, in their experience.

Ask participant about the ICTs (social media?) they use, obtained from the pre-interview questionnaire.

1. Is building community difficult in the residence building that you live in?
   - Why or why not?

2. What helps you connect with your peers in residence?
   - What about on campus?

3. Do you think the use of social media helps people build community in residence/on campus?

Why or why not?

4. Which SM platforms help you connect with your peers in residence/on campus?
   - Who else do they help you connect with?

5. Do you think it's possible to form strong community bonds through applications and social media platforms?

6. Which SM platforms do you prefer to use?
   - Why?
   - Which could you do without?

7. Do you think technology can facilitate community generally while living in residence?
   - Why or why not?

8. Do you have any other thoughts or comments?

Appendix E

Coding Materials