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**PERCEPTIONS OF SOCIAL BONDS, SOCIAL ENGAGEMENT AND SOCIAL
CAPITAL BY SOCIAL NETWORK SITE USERS**

by

ALISHA M. BECKROW

DISSERTATION

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

2015

MAJOR: COMMUNICATION

Approved by:

Advisor

Date

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DEDICATION

This is dedicated to my family (Mom, Alstyn, Brenda, Sean, Quinn, Chad, Uncle Ken and Dad) and friends (too many to list, you know who you are) for their love and support throughout all my efforts in completing this graduate degree. I love and appreciate you all more than I can say.

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CHAPTER 1

INTRODUCTION, LITERATURE REVIEW, AND RESEARCH QUESTIONS

Introduction

Computer mediated communication (CMC) is a technologically-mediated form of communication that allows people and groups to use technology to maintain contact with one other (Wellman, 2003). There are asynchronous forms of CMC such as email or Facebook messages as well as synchronous forms such as instant messaging (through email services or Facebook). The use of social network sites (SNS) such as Facebook, Twitter, and LinkedIn allow people to maintain current relationships, reestablish old relationships, and create new relationships. These new forms of communication have generated key questions of interest that have been investigated by several researchers (boyd, 2006, 2008; Byrne, 2007; Putnam, 1993, 2000; Wellman, 1996, 1999, 2003). These questions include, If these sites reinforce social bonds, what are the mechanisms for doing so? Can this form of communication facilitate social engagement? Do these sites contribute to social capital of network members in and through public space? The proposed study will apply channel complementarity theory, which suggests that use of social network sites is a supplement to offline communication, to explore these questions.

This study will investigate the level of social bonds, engagement, and social engagement of a group of young professionals, a group that extensively uses SNS in both their personal and professional lives. To generate data a survey will be conducted among the group members of three similar organizations regarding the type of activities and amount of time spent using the group social network site in order to answer this study's three primary research questions.

Conceptualization

Social Media Background

Computer mediated communication has been studied in the workplace and, more recently, as social network sites. boyd (2006), for example, placed 43 different social network sites in a timeline starting in 1997 and concluding in 2006. Some sites still exist, some do not. Some have evolved based on user demands (Facebook and MySpace), others did not (Friendster). Friendster preferred to dictate how users would use the site which led users to go elsewhere to fulfill their social network site needs (boyd, 2006). MySpace began as an online venue for bands to promote their music and gain fans (boyd, 2006). It evolved as a social network site where current friends stay connected or old friends reconnect. Facebook has also become primarily a social network site. It began as a site for Harvard University students and then became available to those with an .edu email address. It is now available to anyone who wants to create an account on the site.

Social network sites can be used as both private and public communication tools. A user can post public messages to a friend's wall or blog as well as send a private email. Several studies report on how Americans use the Internet and, more specifically, social network sites. Eighty-six percent of women, ages 18-29, are online compared to 80% of men in that age range (Fallows, 2005). Forty-four percent of men and 39% of women are online several times a day (Fallows, 2005). Men are more likely than women to check news, weather and financial information, download music files and use a webcam while women are more likely than men to send and receive email (about news, worries, advice, and planning), and search for health and religious information (Fallows, 2005). Women place great value on communicating with friends, family, and colleagues than men while men value communicating with special interest groups

(Fallows, 2005). Twenty-six percent of teens visit these sites once a day, 22% visit several times a day (Lenhart & Madden, 2007). Ninety-one percent of teens use these sites to stay in touch with local friends, while 82% use it to stay in touch with friends they rarely see; 72% use it to make plans with friends; 49% use it to make new friends (Lenhart & Madden, 2007). Since 2005, the use of social network sites has grown. In 2005, 8% of the population used SNS (Duggan & Brenner, 2013). In 2012, 67% use SNS (Duggan & Brenner, 2013). Certain age groups utilized SNS more than others. In 2005, 9% of 18-29 year olds used social media and by 2012 they became the top SNS users at 83%, 67% using social media on mobile devices (Duggan & Brenner, 2013). Use has also increased for the 30-49 age group, 7% using social network sites in 2005, and 77% in 2012, 50% using mobile devices (Duggan & Brenner, 2013). In other words, these studies have found that people are using the Internet for a variety of purposes, including using social networking sites. What constitutes social networking however is not always clear.

Typically, people reference SNS using the term “networking” or they use “network” and “networking” interchangeably. Researchers studying SNS use “network” rather than “networking” for a variety of reasons. The traditional definition of communication includes the concepts of senders and receivers while a more current definition might include defining Internet communities as “networks” due to the interactivity of the medium (Morris & Ogan, 2006). Wasserman and Faust (1999) consider the following elements part of a social network: actors (individual, group, organization), ties (reciprocated or unreciprocated link between actors), relations (type of tie i.e. friendship, trust, reciprocity, advice), and group (a set of actors bounded together). Garton, Haythornthwaite, and Wellman (2006) found that a network built using a computer was one way of maintaining ties with people and organizations. boyd and Ellison

(2007) define the type of sites described earlier as “social network sites” because the connections made using these sites are often due to an existing, off-line relationship. For example, only 7% of Facebook users have “friends” whom they have never met in person (Hampton et al., 2011). The potential is there for people to make connections with strangers. But, stranger connections or relationship initiation do not happen enough to warrant the use of the term “networking” (boyd & Ellison, 2007). A successful network builds reciprocal relationships which are based on repeated communication among individuals and the expectation of future interactions (Chewning & Doerfel, 2009). Wellman & Berkowitz (1988) consider a social network a set of people or groups who are connected through a meaningful relationship such as family, friends, or co-workers. Hampton et al (2011) had similar findings with people citing their Facebook “friends” as people they knew from high school and college, family, coworkers, neighbors, and people they volunteer with. People give advice, share information, and gain trust through the relationships in a social network (Wellman & Berkowitz, 1988).

Social network sites such as Facebook provide the potential for users to maintain core, face-to-face social networks. As the theory of channel of complementarity suggests, by drawing on selective exposure and uses and gratifications theories, media users are an active not passive audience (Peters et al., 2007). Engagement with others using social network sites supplements offline interests in activities and communities and relationships with people (Dutta-Burgman, 2006.) This theory is explained further in the upcoming theory section.

In a survey conducted by Hampton et al (2009), respondents noted that 71% of all social network sites have at least one member of their core network as a “friend” on the site. The majority of 18-22-year-olds, 30%, use a social network site to maintain contact with 90% or more of their core network (Hampton et al., 2009). These results relate to boyd’s definition of

social network whereas Acar's (2008) work contradicts boyd's definition. Acar (2008) found that women seem to have larger online social networks, spend more time communicating with network members, and are less worried about adding new, unknown people as "friends." Despite Acar's (2008) findings that users utilize SNS for networking with unknown people, for the purposes of this study, Internet sites such as Facebook and MySpace will be considered social "network" sites. Further, in addition to the term network, social capital and engagement need to be defined as they will be used throughout this project when discussing the impact of SNS in people's everyday lives.

Social Capital

Social capital is produced through networks of relations (La Due Lake & Huckfeldt, 1998). Mathwick et al (2008) agree that social capital is a study of norms and networks. It is a way to measure the strength of communities, in the connection between individuals (Putnam, 2000). The individual connections are social networks that show norms of reciprocity and trustworthiness (Putnam, 2000). The structure of a social network is likely to influence social capital accumulation (Mathwick, et al., 2008). Many relationships result in a lot of social capital and few relationships results in less social capital. Ellison, et al (2007) built on Putnam's (2003) idea of bridging and bonding social capital and the use of Facebook. They found that bridging social capital (building relationships with others different than you) is possible which could lead to a better college experience while bonding social capital (building relationships with others similar to you) was less likely due to the fact Facebook could be used to keep people at a distance (Ellison, et al., 2007). It is in people's best interest to consider bridging social capital important in the calculus for social and civic engagement (Steinkuehler & Williams, 2006). In other words, people's relationships or ties to others vary in their intensity and that is acceptable.

A strong tie relationship can supply extensive support to the actors in a network because they have invested a large amount of time and attention in a variety of ways (Donath, 2007). Donath explains that strong tie relationships are close connections where members will be there for each other in emergency situations and share multiple interests, yet these connections are often homogenous while a weak tie relationship among actors in a network means there are fewer interactions and fewer shared experiences. She states that is often more diversity among those in weak tie relationships yet they most likely only know each other for one specific purpose and only interact for that purpose. She also argues for a combination of strong and weak ties, with strong ties giving a person reliability and weak ties expanding the scale and scope of a network. She also raised questions regarding strong and weak ties, asking if SNSs will create a social world where we have few strong tie relationships and a great deal of weak relationships. Brandtzaeg's (2012) longitudinal study found that Facebook enhanced weak ties or bridging capital. Although, it may predominately apply to those who believe socializing is a priority in their lives (Brandtzaeg, 2012). This corresponds with the theory of channel complementarity in that it states, people will use technology, the Internet or social network sites as it best fits in their lives. It is not a replacement for aspects of their lives, it is adopted to complement what they value in life. SNS does not replace face-to-face interaction and SNS users are more likely to interact in face-to-face interactions and increase social capital versus non-SNS users (Brandtzaeg, 2012).

Social network analysts' measure social capital in two possible perspectives, groupist or individualist (Prell, 2003). The individualistic perspective of social capital looks to the relationships between the actors in the network (Prell, 2003). Those with a high level of degree centrality have a large number of social ties to the other actors in the network (Prell, 2003).

When an actor is the connection for resources between two other actors in a network he/she has more social capital (betweenness centrality) (Burt, 1997; 2000). Understanding whether an organization is structured using betweenness or degree centrality is important information in regards to how actors relate to each other (Prell, 2003).

Features such as interconnectivity and centrality have been associated with benefits such as reciprocity and trust among one's peers (Tsai, 2000). The works of Putnam (1993, 2001), Coleman (1990) and Bourdieu (1987) have examined the interconnectivity of the entire network and how it relates to trust, reciprocity and/or general well-being for the whole network (Prell, 2003). Researchers Putnam and Coleman approach their studies of social capital as it being a tool for society's ills (Fulkerson & Thompson, 2008). For example, Coleman (1988) states that a social structure consisting of volunteering, working, and organization memberships will facilitate social capital. Those who are part of these structures become fully engaged in civil life because they meet more people and develop their social networks (Verba et al., 1995). Bourdieu takes a different approach. Bourdieu's work considers social capital a resource that may be used to create or maintain social inequality (Fulkerson & Thompson, 2008). Jennings and Zeitner (2003) agreed that the Internet would aggravate already existing inequalities in civic engagement among users. There is the assumption by social capital theorists that all groups are good not questioning if they have membership exclusions or noting what their philosophies might be (Thomson, 2005). There is also the assumption that it is the people who are less trusting if they are less likely to join a group rather than considering the group might not be trust-worthy (Thomson, 2005).

In addition to belonging to a trust-worthy group and being connected to other actors in a network, social capital involves engagement within the group. Social capital is a byproduct of

social activities such as singing in a choir or membership in an organization (Putnam, 1993). The social capital is built by being part of social activities and is transferable to other social settings due to the ties, norms and trust of the participants (Putnam, 1993). The type of capital people build is also related to the others in the network. For example, La Due Lake and Huckfeldt (1998) note that for someone to gain political capital one must have others in the network with political knowledge and expertise.

In the analysis of social capital pre-Internet and social network sites, researchers found that people may have strong and weak tie relationships, each fulfilling needs of the individual, increasing their social capital which is positive for the individual and the community. When a new medium is introduced into popular society, there is the possibility it may add or detract from the building of social capital. Today, with the prevalence of social network sites in our lives, some researchers have found SNSs to be detrimental to building social capital because it pulls people away from rich face-to-face interactions, while others found it facilitates social capital because it can be integrated into lives to increase the number of connections thus increasing social capital. Social network sites also enable people to engage with those connections, thus increasing social capital. What is considered engagement should be defined before proceeding.

Engagement

In addition to the concept of social capital, the term engagement is associated with this area of research. The term engagement, when associated with the Internet and social network sites, has been tied to social, civic, and political involvement. Researchers considered a wide range of activities engagement. Participating in activities such as bowling leagues, attending club meetings or hosting a social gathering were considered social engagement. Volunteering was considered civic engagement. Voting and interest in the political environment was

considered political engagement.

One of the concerns critics most often cite regarding the Internet is the possibility that users will be more socially isolated. Putnam (2003) studied how younger generations are less socially, civically, and politically engaged than previous generations. Civic engagement is participation in an organized voluntary activity which is focused on helping others and solving problems (Zukin et al., 2006). Political engagement is defined as participating in an activity which will influence public policy or the election of those who make public policy (Verba, Schlozman & Brady, 1995). There is a fear that the Internet will weaken social contact with friends, coworkers, and neighbors will decrease involvement in voluntary organizations or civic matters and will cause people to be disengaged from their communities (Quan-Haase et al., 2002). They consider the possibility of network capital (frequency of social contact with friends, coworkers, and relatives), civic engagement (participation in voluntary organizations), and sense of community (attitude toward community) decreasing (Quan-Haase et al., 2002).

Networks of civic engagement build trust through communication and coordination of efforts (Putnam, 1993). We are able to see the potential for future collaboration within a network of civic engagement based on their history of collaboration (Putnam, 1993). Zukin et al (2006) found that younger citizens were less involved in political engagement but equally involved with civic engagement when compared to their parents (baby boomers). Trust and general reciprocity facilitates social life (Putnam, 1993). People are engaged with each other, socially, civically or politically if they interact with each other – if they are engaged with each other. The interaction aides in building of trust among other members of a group, on or offline.

For the purposes of this project engagement is focused on social aspect of people's lives. This is considered face-to-face interactions but also mediated interactions though SNS. The

engagement may be attending a function as part of the SNS organization, posting a comment regarding an event (whether the commenter attended or not), posting a response to fellow members and the like.

Engagement is associated with building of social capital. As mentioned in the discussion of social capital, the level of connection people have with each other is related to the amount of interaction with each – the fewer the interactions the weaker the tie among individuals, the more interactions the stronger the tie. People could be engaged with their communities and/or social network sites socially, civically or politically. The following research explores how social network sites may or may not facilitate this engagement among users.

Social Media as Facilitator of Social Engagement

One of the assumptions about social media is that these sites may be used to create greater levels of social engagement among users. The concept of people using the Internet to connect and communicate with others (social media) began in 1996 with the site “Six degrees.com” (boyd & Ellison, 2007). Social media may be used as an additional medium to communicate about topics, events and/or build relationships with others (Wellman & Hampton, 1999). Wellman and Hampton (1999) argue that the Internet increases socialization.

A 2001 survey found that Americans use the Internet to plan church meetings and neighborhood gatherings, petition local politicians, find information about the community, organizations, and local merchants (Rainie & Fox, 2001). Researchers found that 35% of users “often” or “sometimes” go online for news about their community or community events (Rainie & Fox, 2001). Also, 11% said they were aware of at least one local issue where the Internet played a role in organizing citizens to communicate with public officials while 22% were aware if they were active online community members (Rainie & Fox, 2001). They found hobbies to be the

primary draw for younger people to join online communities; fostering civic engagement was secondary (Rainie & Fox, 2001). They categorized various users into groups including a “civic engagement group,” which is the type of group this project is seeking to study. This group has more experience with the Internet (3-5 years) and was more educated than those who use the Internet as a whole. They were also older (35-55 years old) (Rainie & Fox, 2001). Twenty-nine percent have contacted a local community group online and 30% have used the Internet for involvement with a local charitable organization (Rainie & Fox, 2001). They concluded that the Internet may develop into a new way for young people to become civically engaged (Rainie & Fox, 2001). Others such as Jennings and Zeitner (2003) and Uslaner (2000) agree.

The Internet neither destroys nor creates trust or social capital (Uslaner, 2000). Uslaner (2000) found that the Internet is not a sanctuary for people who do not trust others and they are no less likely to trust others than non-Internet users. People with stronger offline social networks do not avoid the Internet (Uslaner, 2000). There is little evidence the Internet pushes people away from traditional social ties or makes them less trusting (Uslaner, 2000). The Internet is a new way for people to be civically engaged, neither encouraging greater engagement nor decreasing engagement (Quan-Haase et al., 2002). It is a supplement to existing offline participation in organizations and politics (Quan-Haase et al., 2002). This is as the theory of complementarity suggests, that people who are engaged in their local communities, organizations or politics will be found to be engaged similarly online (Dutta-Bergman, 2006). The more people spend online the more they feel a sense of community with online communities (Quan-Haase et al., 2002). There seems to be no greater feelings of community toward offline community based on time spent online nor does the time make people feel alienated (Quan-Haase et al., 2002).

Wellman, et al (2003) suggested that civic involvement may also be taking the form of e-

citizenship. In this case, the engagement would be less visible and less public than traditional notions of civic engagement. Changes in technology allow people to always be connected online and creates the ability to personalize online experience (Wellman et al., 2003). Being online may afford opportunities to be engaged in the community and/or larger causes; users may do more than post new pictures on social network sites (Wellman et al., 2003). Katz and Rice (2002) also believe that the Internet contributes to social capital. Their survey found that the digital divide is shrinking with Internet use increasing community and political involvement, offline and online social interactions (Katz & Rice, 2002).

Analysis of the impact of the Internet should consider how the Internet may be contributing to new forms of interaction and community that cannot be measured using standard indicators of social capital (Wellman et al., 2003). It is possible that e-participation and e-socialization could be utilized more to tap people for more involvement (Shah et al., 2002). Technology could be used to foster “electronic neighborhoods” to enhance real-time communities where people can meet others and get the social support of doing similar work (Marotta & Nashman, 1998). These social CMC organizations are generally built on identity and shared values (Warnick, 2001). Rather than relying on a single community for social capital, people can actively seek out appropriate people and resources for their situations (Boase et al., 2006). Shah et al (2002) supported the view that time online positively predicts community engagement but their work did not support that community engagement predicts time online.

Umaschi Bers and Chau (2006) suggested that new technologies can provide a safe environment for youth to experiment with civic engagement with respect to sharing, constructing, defining and deliberating personal and civic opinions. Online activities may fall into two types – those that develop and maintain network ties such as email, listservs, bulletin boards and chat rooms

and those that reduce connectivity such as web surfing or news reading (Zhao, 2006).

Recent studies regarding trust and online social networks confirm previous study findings. For example, Facebook users, especially those who use Facebook multiple times per day, are more likely to be trusting (Hampton et al., 2011). Social network sites can foster norms of reciprocity, trust and thus opportunities for engagement (Gil de Zuniga et al., 2012). Quan-Haase et al (2002) and Duggan and Brenner (2013) had similar findings. The average social network site user is less likely to be socially isolated than the average American, has more close ties and is more trusting (Duggan & Brenner, 2013). Although Trainor's (2012) work refers to the social media relationship between customers and companies, the findings can apply here as it found that users feel an increased sense of community when they increase the amount of their SNS engagement. Social media has also been recognized by more than half of Americans as a facilitator of cause engagement, acting as a tool which makes supporting a cause easy (Dixon & Keyes, 2013). Users feel empowered when they are active participants or co-creators of the group's value (Trainor, 2012). When information exchange occurs through social network sites, trusting relationships are built among members of a social network site group thus increasing social capital (Gil de Zuniga et al., 2012).

Social network sites are a communication tool utilized in today's society by a large part of the population. Users have been known to discover opportunities for engagement, finding online groups or groups with online components in order to become socially engaged. It is used to communicate with fellow group members, to organize group activities, and to find relevant information about the group. Becoming engaged using social network sites can be considered a safe way to test out a new group or share opinions, encouraging younger generations to become more engaged, make more connections, increase their social capital.

Some of the studies completed in the early part of the century noted the potential of SNS in regards to engagement. It is possible there would be lurkers in the group, those who join the group and follow the group activities but never join in. Lurking may not seem like engagement to more active members but that involvement may be enough for that lurker to feel part of the group. Or, as the following section explores, it is possible that the SNS is actually a detriment to social engagement.

Social Media as a Detriment to Social Engagement

Not all research supports the idea that CMC can complement engagement. Neil Postman (1985) began his work in this area with television. His work has since been generalized to forms of new technology. Postman argues that a major new medium gradually changes the structure of discourse (Postman, 1985). If the delivery changes the message, the social and psychological meaning is also different. Postman asked if computers would make people more egocentric and if we would be valued for being so (Postman, 1992). This is an important question due to the fact that social network sites such as MySpace and Facebook are focused primarily on the individual. Also, this question was initially posed well before social network sites gained widespread popularity. While technological innovation is generally seen as synonymous with human progress, he asked what traditions and skills are lost in our computer culture (Postman, 1992).

Norris' 1996 study was performed with Putnam's assertions in mind regarding television eroding social capital. The cross-sectional survey of Americans found that those who watched more than 3.3 hours of television per day were less civically engaged compared to those who watched for 2.5 hours (Norris, 1996). Yet, when examining what was watched, it was found that those who watched network news or current affair programs were civically engaged but not

necessarily politically engaged (Norris, 1996). Social trust, confidence in government, civic engagement and political participation are often studied together yet their positive and negative associations may not be related to each other (Norris, 1996). Norris (1996) states that further research is needed to discover if turning off the television and joining a bowling league will address the problems of confidence in the American government or trust in American society. And, what if the bowling league also created its own group on a social network site? Would it add another dimension to the face-to-face group allowing members to interact in another way? As noted earlier, trust is important in building social capital and that interaction among users of a SNS could build trust between the users. Maybe it is not a causal relationship. If the Internet is only for socializing, the person is less trusting, socializing should not be mistaken for trusting (Uslaner, 2000).

There is little evidence the Internet will create new communities which will make up for a decline in engagement (Uslaner, 2000). The Internet does not provide a new spirit of community but it is an additional outlet for the connected (Uslaner, 2000). In other words, the Internet is not causing people to become more engaged or social with each other. People using chat rooms are no more or less sociable (Uslaner, 2000). Simply stated, those who wish to be social can use the Internet or social network sites to do so as a complement to how they enact their social behaviors, build trusting relationships and social capital currently.

Similarly, Putnam (2000) analyzed data in order to support his claim that the youth today are less civically engaged than their parents or grandparents. He referenced television use as detrimental to civic engagement (Putnam, 2000). He argued that live encounters with others were somehow more “special” and provided stronger and deeper relationships, but that their relative number was decreasing (Putnam, 2000). He acknowledged that his conclusions were

circumstantial and that other factors were contributing to this decline such as pressures of time, money, two-career families, commuting, and a change in generations (Putnam, 2000).

Postman and Putnam are not alone in their arguments. Nie and Erbring (2000) assert that the Internet detracts from social contact. Mass society theorists do not believe television is a vehicle for social integration just as some social capital theorists do not believe the Internet will produce community (Thomson, 2005). There needs to be personal connection that technology does not provide (Thomson, 2005). People choosing to join groups for selfish reasons such as to build a resume or make job connections is considered “uncivic” (Thomson, 2005).

Putnam (2003) continued this work using twelve case studies of community programs. These cases were post September 11th which Putnam believed constituted this generation’s global catalyst to become engaged. Each case might be inward looking (bonding social capital) or outward looking (bridging social capital) (Putnam & Feldstein, 2003). The concept of social capital essentially refers to networks, norms, and trust (Farr, 2004). Putnam and Feldstein (2003) found that social capital took time and effort to develop and that face-to-face interaction was most important. Social capital was a local phenomenon because it needed connections of people who knew each other (Putnam & Feldstein, 2003). The Internet played a surprisingly small role and social capital was usually developed for a particular goal not for its own sake (Putnam & Feldstein, 2003). For example, an organization may have a presence in a social network site and use the site to gain participants for an upcoming event. But, what happens when the event is over? Are relationships maintained? What happens to the group if there are no upcoming events? Do members go back to the site to discuss topics? Those using listservs, precursors to social network sites, were sporadic in their communication and memberships fluctuated (Cummings, Butler, Kraut, 2002). Even a hybrid group of members of the listserv who met face-

to-face were “weak-tie” communicators online (Cummings, Butler, Kraut, 2002). Byrne (2008) examined a group of African Americans, who had a history of being involved with the community. She found that this group did not move past the online discussion phase to face-to-face involvement (Byrne, 2008).

As new communication tools are introduced to society, researchers seek to discover the impact on our lives. It was found that television had a negative impact on the level of engagement people had with each other – if they were watching television programs, they were not interacting within their communities, making connections, and building social capital. When the Internet and social network sites became as popular as television, the same concerns were projected on that medium. While there is the potential to make connections with anyone with Internet access and the same interests, social capital was considered a local phenomenon with connections being made among people who know each other. Face-to-face connections are considered to be more valuable than those maintained using social network sites. If a social network site allows for people to make the connections with like-minded people, it is questioned whether it can be used to maintain the group or if it has the potential to get the group past the discussion phase and move toward action.

Further research could investigate if it is still the case that the Internet is allowing people to build social capital/relationships only to satisfy a specific goal. The previous two sections highlight research that found SNS either fostering or restricting engagement. Researchers such as Putnam and Postman believe in face-to-face interactions, while others (see Wellman, 2003; Byrne, 2008) believe engagement does occur online. The following section explores the possibilities of SNS reinforcing social bonds between users regardless of face-to-face interaction.

Social Media and Social Bonds

Previous sections have defined social networks, social capital, and engagement, and explained the possibility of social network sites facilitating and prohibiting individuals' potential for engaging with each other online and in face-to-face situations. It is possible with social network sites to have "friends" who never meet face-to-face for social interaction or to accomplish a specific goal or task. The following section explores the possibility for people to use social network sites to create a community with or without face-to-face interaction.

Building relationships goes beyond accepting a "friend" request and never connecting, in some way, with that "friend" again. Acar (2008) determined that online social networks are larger than unmediated networks. This raises important questions. Is it possible people are satisfied with hundreds of online friends and fewer off-line friends? Is it possible people build or maintain the relationships or "friend" someone and never initiate or reciprocate contact again?

Using sociometric technique and drawing on social network perspective of organizational coordination Tsai (2000) found social capital and strategic relatedness affect the creation of new links between people. Trust also affects the development of new social linkages (Tsai, 2000). Organizations with a strong social capital can form new links quickly for a resource exchange (Tsai, 2000). In other words, when there is a common goal or task among members of an organization, new links among members are quickly formed. It is more difficult for new links to form when people do not have a specific reason to interact with each other. Jarvenpaa and Leidner (1999) also studied the possibility of developing trust among those communicating and working using computer mediated communication. They found that swift trust is based initially on the social structure and action (Jarvenpaa & Leidner, 1999). If those communicating and working predominately using computer mediated communication have definitive roles and follow through on promised actions then trust is formed (Jarvenpaa & Leidner, 1999). In other

words, as with face-to-face groups, a SNS has a better chance of engaging its members if there are people in leadership roles, people who can facilitate some action among fellow users. As Putnam (2000) stated community engagement can include actions to better the community or build social networks and draws on the norms of reciprocity and trust. Based on these studies, it is reasonable to expect that building relationships involves more than merely accepting a friend request in a SNS. Farr (2004) believes that the future of social capital may lie with civic education, either in its current form or in evolving notions of civic engagement, such as virtual engagement. Rafaeli and Sudweeks (1997) found that online groups that are more interactive will more likely accomplish their goals, sustain membership, and give members a sense of belonging. Groups that are not interactive may maintain a steady number of members but on a “rotating door” basis. Again, interaction is necessary to build network/community/social capital beyond accepting a friend request. Jarvenpaa and Leidner (1999) suggest that, to be part of a virtual team, someone should serve as a manager, and define clear goals and responsibilities for the participants. Designers of community sites need to channel all users to a “home page” where general community materials/communications can be found (Millen & Patterson, 2002). Someone with experience with online groups should help the site begin, recruit members, and facilitate/stimulate interactivity among members (Millen & Patterson, 2002). It is also suggested that participants be open and honest in their communication, follow through on any promises they make, and concern themselves with quality not quantity in their participation (Jarvenpaa & Leidner, 1999). Moreover, Stukas and Dunlop (2002) believe that true social progress and social change may occur when mutually fulfilling relationships are created in a community. Thus, only by examining people’s full set of social behavior and examining their full inventory of social ties can we assess the net social impact of online social relationships (Cummings, Butler & Kraut,

2002). Volume of communication and feeling of closeness with others differ depending on the type of communication, face-to-face or online (Cummings, Butler & Kraut, 2002). It was found that people reported feeling closer to those in their offline relationships than their online relationships possibly due to less or weak communication online (Cummings, Butler & Kraut, 2002). Additionally, males who are heavy SNS users reported feeling lonely due to less meaningful online connections (Brandtzaeg, 2012). In fact, their loneliness was greater than non-SNS users (Brandtzaeg, 2012).

Yet not all researchers agree that face-to-face or geographical proximity is a requirement in building social capital. Wellman and Hampton (1999) consider people's social relationship and institutions more important than where people physically live. They concluded that communities are based on social exchange (Wellman & Hampton, 1999). Therefore, those who use SNS also may have face-to-face meetings and rather than pulling people away from each other SNS pulls people away from solitary television viewing (Wellman & Hampton, 1999). They ask the question, Will CMC reconnect the disaffiliated (Wellman & Hampton, 1999)? Youth may be some of the "disaffiliated" according to Delli-Carpini (2000). Delli-Carpini (2000) argued that, among other things, youth are less trusting, less likely to participate in community organizations, and less likely to connect individual efforts to help solve problems with more traditional forms of civic engagement. Trust shapes how people interact with each other. If you don't interact with others you are less likely to trust them (Uslaner, 2000). The Internet did not elicit a lack interpersonal trust or trust in political engagement for the older generation studied by Jennings and Zeitner (2003). The younger generation did not report a lack of political trust but some interpersonal trust in using the Internet (Jennings & Zeitner, 2003). Youth are generally not engaged because they feel alienated from opportunities to become

involved (Delli-Carpini, 2000). Both the news media and traditional civic organizations are geared toward older audiences not the fast-paced, entrepreneurial, mass-mediated younger audiences (Delli-Carpini, 2000). In other words, people may want to use social network sites to become engaged offline yet these organizations may not be online in a way that facilitates this. Hargittai (2007) argues that the everyday digital media practices of youth should be studied in order to understand how communication and information technologies affect their lives. The use of social media in this way is a relatively new phenomenon and the implications are not yet well understood.

Stepping beyond the acceptance of an online “friend” request, researchers found that interactions among people on a social network site will build trust among those individuals. Groups with a social network site presence can encourage interactions by assigning someone to manage the site, directing the interactions, and guiding the group towards its goals. When there are common goals and tasks, people have a reason to interact, building trust, strong bonds, and social capital. Face-to-face interactions may also assist in building stronger bonds among members but not all researchers found it to be essential.

The previous studies indicate that some people are disaffiliated from each other and their communities. Successful SNS groups engage members when there people who manage the site and facilitate interactions. Whether researchers believe face-to-face interaction is needed to develop strong ties with others or not, there does need to be some interaction to build social capital. Users seem to be looking for a similar format as a traditional face-to-face group, such as set roles and purposes that build trust among members. Using SNS, it is possible to build ties with those who are similar and different than ourselves without regard to physical location. Further research might, for example, choose a local organization with an online presence and

question the organizations use of social networks as well as the members use the site to accomplish goals and/or build relationships.

Theoretical Frameworks

Future studies could also test Putnam's assumptions of community involvement in relation to SNS. SNS can be examined using several theoretical approaches. Displacement theory, for example, considers CMC prohibitive to face-to-face interaction (Dutta-Bergman). Social shaping theory considers CMC to be a tool users adapt to their purposes (Dutta-Bergman). Channel of complementarity considers CMC to be a tool used to supplement a user's lifestyle (Dutta-Bergman).

Since the Internet has gained popularity it has evolved expanding in its application and how it can function in our lives (Dutta-Bergman, 2006). Robinson et al (2000) used the idea of displacement theory and determined that computers are more facilitative in nature, as opposed to television, and did not take people away from media-free activities. Displacement is expected to occur because the time available to spend using media is inherently limited by the number of hours in a day and the Internet is predicted to replace newspaper and television use (Tian & Robinson, 2008). In a survey of Internet usage, users reported their use of time offline has changed due their time spent online. Twenty-five percent reported they spend less time watching television, 18% spend less time in-store shopping, and 14% spend less time reading newspapers (Rainie & Horrigan, 2002). It is possible, due to the capabilities of the Internet today, that viewing television programs, shopping, and the reading of newspapers is occurring online. While this survey provides an example of displacement it only provides information regarding use of time rather than time spent in engagement. Displacement theory suggests the consumption of one particular set of communicative activities displaces other forms of

communicative activities (Dutta-Bergman, 2006). Displacement theory locates mediated and community-based communication activities at two ends of a spectrum, arguing that participation in one communicative domain takes away from the time and financial resources allocated to the other (Dutta-Bergman, 2006). In other words, if we spend a significant proportion of our time using Facebook, we have less time to volunteer in the community or vice versa. This is the argument Putnam and others use concerning CMC. If television displaced so many activities, it was predicted that the Internet would compound this displacement (DiMaggio et al., 2001). Nie and Erbring (2002) found support for this view in a random sample of Americans. They found that the more time someone spent with the Internet, the less time they spent in a face-to-face social situation (Nie & Erbring, 2002).

Nie and Erbring (2002) do not intend to paint a negative view of the Internet but argue that time spent online is a tradeoff for time spent elsewhere. Their time diary survey supported the “hydraulic” or displacement hypothesis and contradicted the efficiency hypothesis (Nie & Erbring, 2002). They found that those who spent more time online, spent more time alone (Nie & Erbring, 2002). When using the Internet at home and/or on weekends people spent less time with friends and family (Nie & Erbring, 2002). When using the Internet at work people spent less time with colleagues, yet it did not affect social time with friends and family (Nie & Erbring, 2002). Time spent online competes with face-to-face interactions, it is time spent alone (Nie & Erbring, 2002). They do acknowledge some of the same changes in society Putnam mentioned as factors that influence changes in our social interactions such as commuting and family and household responsibilities (Nie & Erbring, 2002). Bugeja (2005) suggested a split consciousness due to the fact that much of the interaction occurs both in real and virtual environments. He noted that communication technology displaced people and he was concerned that by spending

too much time with the television and computer instead of interacting with others face-to-face, patience, civility, and respect for others diminished (Bugeja, 2005). He referenced Putnam and agreed that we need the face-to-face interaction in order to build character and civic engagement (Bugeja, 2005). Consistent with Putnam, Bugeja argued that we should live three-dimensionally. This means living linearly (in the time we spend interacting with others), horizontally (in the relationships we keep, transcending race, sex, and class), and deeply (in the contributions that we make through those interactions and associations) (Bugeja, 2005). Displacement does not have to mean something negative. Robinson et al (2002) found that Internet use may displace time spent watching television and enhance time spent with old, new or resurrected social network contacts.

There is a finite amount of time in any given day. Displacement theory suggests that by choosing one activity it decreases the amount of time that can be spent elsewhere. Choices are made by individuals regarding not only use of time, but if the time is spent with others face-to-face, online or online in planning some face-to-face time. There seems to be a negative connotation with regards to interaction online versus face-to-face, as if face-to-face interaction is always preferable, that time spent using media is cannot be integrated into unmediated time.

The social shaping of technology theory offers an alternative to displacement theory by centralizing the role of context in media scholarship (Dutta-Bergman, 2006). Early research approached technology as an impetus for social change while the social shaping of technology approach studies the social factors that lead to the creation and experiences of technologies, and the social implications of technology formations (Virnoche, 1998). The social shaping of technology rejects the view of technological determinism which states that technological development shapes society (Mackey & Gillespie, 1992). In one regard, people use technology

as a resource to fulfill their needs, while in another regard technology impacts individual behavior by satisfying or not satisfying those needs (Dutta-Bergman, 2006).

Some SNS were not necessarily developed to promote altruistic, community-minded activities. Facebook was developed so Harvard students could see who was dating whom. This changed due to the needs and interests of users. SNS developers may not have intended to promote engagement but if users want that the SNS will either adapt to accommodate users or become obsolete. As technology improves and/or increases its presence in people's lives this theory notes that users are not mindless followers in system.

Mackey and Gillespie (1992) extended the social shaping of technology theory using a cultural studies approach. They analyzed technology not only as a process of design but as conception, invention, development and design; marketing and; appropriation by users (Mackey & Gillespie, 1992). Technologies are functionally encoded with a preferred use (Mackey & Gillespie, 1992). They can also be symbolically encoded with a distinction between a technology's use and symbol (Mackey & Gillespie, 1992). The marketing informs the design of technology and constructs the demand for it (Mackey & Gillespie, 1992). Demand is socially constructed because people are not submissive subjects who will surrender to the will of technology (Mackey & Gillespie, 1992). People can reject technology or redefine it to fit their purposes (Mackey & Gillespie, 1992). Technologies facilitate rather than determine (Mackey & Gillespie, 1992). Users are not controlled by technology; rather technology is controlled by users. Those developing new technologies are informed by those using the technology.

For example, boyd (2008), in her research regarding youth which included social network sites, found that users tend to rework technology for their purposes. They incorporated social media into their lives which potentially complicated or reinforced the various aspects of their lives

(boyd, 2008). In one study, boyd (2006) focused on the social network site Friendster whose creators intended it to be a site for dating purposes. Users had other ideas. Users utilized systems, for other purposes so the creators eliminated those options or deleted accounts (boyd, 2006). This led users to begin using MySpace instead (boyd, 2006). In general technology is viewed a neutral, neither good nor bad (Kranzberg, 1986). How technology is created, how people use it or reconfigure it is not a result of the technology alone (boyd, 2008).

The idea that there are relationships built online has led to the theory of channel complementarity (Dutta-Bergman, 2004). The theory of channel complementarity draws its conceptual foundation from selective exposure and uses and gratifications theories (Dutta-Bergman, 2006). Media uses and gratifications theory is based on the idea that media users are an active not passive audience (Peters, et al., 2007). These active participants are motivated to fulfill a need by a particular medium (Peters et al., 2007; Dou et al., 2006). Internet users may desire to kill time by browsing online, to capture some content or socialize (Stafford & Stafford, 2001; Stafford, Stafford, & Schkade, 2004). They fulfill surveillance needs as a way to observe and understand changes in their world or fulfill a need to escape their daily lives by using the medium as a diversion (Dou et al., 2006).

The theory of channel complementarity deals with the limited research about community-specific uses of the medium (Dutta-Bergman, 2006). The role of the Internet is critical in community participation because it can provide critical and relevant information to members who are already involved in their communities (Dutta-Bergman, 2006). Rather than SNS displacing people or keeping people from each other it has potential to keep those already connected “in touch” or it may assist those looking for ways to connect with others. In other words, if someone is interested in community involvement they are likely to use the Internet to

find out about the community. The Internet is a tool for communication among community members rather than attributing to it a competitive role as conceptualized in the techno-deterministic approaches embodied in the displacement and cultivation theories (Dutta-Bergman, 2006). They found this to be true in looking at the secondary data as well as congruence between consumption of different channels that serve the function of community participation (Dutta-Bergman, 2006). Rather than being compared as a “better” or “worse” form of communication, social media could work with face-to-face communications in our multi-media lives (Squire, 2004). Squire (2004) noted that mediated forms of communication are similar to unmediated communication i.e. instant messaging is like speech and email is like writing. In other words we have more ways to communicate with each other that mimic our pre-Internet methods. SNS does not have to compete for our time and attention. It could be incorporated into our lives with our other interactions such as club membership, bowling leagues, and neighborhood barbeques.

The theories described above all have the potential to be used for further inquiry into the use of CMC in social engagement. For the purposes of this investigation the theory of channel complementarity will be applied to a group that has both the potential for face-to-face interaction and a presence online. The channel complementarity theory allows for the Internet or social network sites to be used as part of an individual’s life rather than as something that would displace other aspects of their life.

Rationale for Present Study and Research Questions

SNS have grown in use since they started in 1996. They have become a fixture in the lives of a large percentage of the population. With the Internet and growth of SNS, people’s lives are more mediated than ever. The Internet and growth of SNS has allowed people’s

mediated lives more interactivity with that specific media. The idea that social capital is affected when new technology is introduced to society is not new. Current research has considered the Internet and specifically social network sites as a communication tool that may potentially increase or decrease social capital. For people to gain social capital they need to be involved with groups and make connections with others. Traditionally, this meant face-to-face interactions. With the Internet and social network sites, it is proposed that there is an additional way for people to be engaged. Previous research has indicated that people have lost a sense of community and are less involved in communities and groups (See Putnam and Postman). Other research indicated that social network sites provide another way for people to foster engagement with each other regardless of geographical proximity (see Wellman). This study seeks to investigate if either of these positions on the state of community and group engagement prevails and asks the following research questions.

People's relationships or ties to others vary in their intensity. A strong tie relationship can supply extensive support to the actors because they have invested a large amount of time and attention in a variety of ways (Donath, 2007). A weak tie relationship among actors means there are less interactions and fewer shared experiences (Donath, 2007). Donath (2007) argues for a combination of strong and weak ties, with strong ties giving a person reliability and weak ties expanding the scale and scope of a network. A successful network builds reciprocal relationships which are based on repeated communication among people and the expectation of future interactions (Chewning & Doerfel, 2009). Garton, Haythornthwaite, and Wellman (2006) found that a network built using a computer was one way of maintaining ties with people and organizations. For the purposes of this study social bonds are the feelings of trust, shared experiences, and similarity of goals the social network site user has with the group and its

members.

RQ1: Do users of social networking sites report that use reinforces social bonds and if so what mechanisms do they report as reinforcing social bonds?

The term engagement, when associated with the Internet and social network sites, has been tied to social, civic, and political involvement (Putnam, 2003). Researchers considered a wide range of activities engagement. Participating in activities such as bowling leagues, attending club meetings or hosting a social gathering were considered social engagement (Putnam, 2003). Volunteering was considered civic engagement (Zukin et al., 2006). Voting and interest in the political environment was considered political engagement (Verba, Schlozman & Brady, 1995). People are engaged with each other, socially, civically or politically if they interact with each other. The interaction aides in building of trust among other members of a group, on or offline. For the purposes this project engagement is focused on the social aspect of people's lives. This is considered face-to-face interactions but also mediated interactions though SNS. The engagement may be attending a function as part of the SNS organization, posting a comment regarding an event (whether the commenter attended or not), posting a response to fellow members, a public conversation with a friend on his/her wall, a private conversation with a friend, posting a comment to a friend's post, posting a comment to a friend's photo, liking a friend's post, liking a friend's photo, RSVPing to an invite, posting an invite or joining a group.

RQ2: Do users of social networking sites report that this form of communication facilitates social engagement and if so what mechanisms do they report as facilitating social engagement?

Contemporary social capital scholars define social capital as a social organization or group with a shared set of norms and social trust which facilitates cooperation among members

that results in achievement of the group goals (Putnam, 2000; Coleman, 1990; Fukuyama, 1997). Social capital is a byproduct of social activities such as singing in a choir or membership in an organization (Putnam, 1993). The social capital built by being part of social activities is transferable to other social settings due to the ties, norms, and trust of the participants (Putnam, 1993). Coleman (1988) agrees stating that a social structure consisting of volunteering, working, and organization memberships will facilitate social capital. The type of capital people build is also related to the others in the network. For example, La Due Lake and Huckfeldt (1998) note that for someone to gain political capital one must have others in the network with political knowledge and expertise. For the purposes of this study social capital is defined as a social structure composed of networks where members work toward a common purpose.

RQ3: Do members report that using social networking sites contribute to their social capital and if so what mechanisms do they report as contributing to social capital?

The more individual connections you have and more groups you belong to that connect you to a community, the more social capital you have. Those with social capital believe people can be trusted and believe making connections with others and groups can accomplish goals such as raising funds or impacting society at large. Some researchers believe that social network sites can accomplish all of the above as well as help people make connections with others outside their local community, possibly with others who are different in age, race or income.

CHAPTER 2

METHODOLOGY

Participants

The population for the study was defined by considering demographics such as age, gender, education, geography, and access (“Conducting Survey Research,” 1999). The study focused on a select population and used previous research to determine that population. Rainie, Purcell, and Smith (2011) determined that of all age groups who use the Internet, those in the 18-29 age range use social network sites the most. Those ages 18-29 are more likely to have a page on a social network site, organize group activities via text messages, have their own blog, and communicate through Twitter when compared to ages 30-49, 50-64, and 65 and older (Rainie, Purcell, & Smith, 2011). Based on a 2012 survey, 83% of those age 18-29, and 77% of those age 30-49 use social network sites, making them the top two age groups using those sites (Duggan & Brenner, 2013). Also, college graduates are more likely than non-college graduates to believe that the Internet has a “major impact” on the ability of groups to communicate with members, draw attention to issues, impact society at large, organize activities, raise money, recruit new members, and find people to take leadership roles (Rainie, Purcell, & Smith, 2011). Those who do not participate in social or civic groups indicate that it is due to lack of time, lack of interest, health issues, lack of Internet access, and being unable to find a group of interest (Rainie, Purcell, & Smith, 2011). Those who do participate in social or civic groups state it is because they believe sometimes things are better accomplished as a group, it is a way to keep up with subjects important to them, and it is a way to meet people who share interests (Rainie, Purcell, & Smith, 2011). Based on the results of these studies it appears, while all age groups can be found on social network sites, younger populations are more active. Also, while it appears that if there

is a group of interest to someone that person will be involved with the group, college graduates especially believe that social network sites contribute to group involvement. Thus, a young professional organization with a SNS would be a logical place to find a group(s) to participate in this project.

After defining the type of population to study, the social network site where they are likely to congregate needed to be determined. According to Rainie, Purcell, and Smith's (2011) survey results, 62% of internet users use Facebook, 12% use Twitter, and the remaining use blogging or texting as digital tools of choice (Rainie, Purcell, & Smith, 2011). Duggan and Brenner (2013) found that 17% of men and 15% of women use Twitter, 5% of men and 25% women use Pinterest, 10% of men and 16% of women use Instagram, 6% of men and women use Tumblr, and 62% of men and 72% of women use Facebook. Because the majority of social network users are utilizing Facebook, Facebook was the focus for this study.

This study selected a specific type of group to study on Facebook and there were many options. According to the Rainie, Purcell, and Smith (2011) survey, the following were considered participation: religious groups, sports/recreation leagues, consumer groups, charitable/volunteer organizations, professional or trade associations, support groups, hobby groups, political parties, alumni associations, parent groups, book clubs, arts groups, fan (sports, TV shows, celebrities, musicians, etc.) groups, youth groups, labor unions, social or fraternal groups, environmental groups, veterans groups, travel groups, ethnic or cultural groups, and farm organizations. Social media groups that do not dominate are religious groups, veterans and travel groups, labor unions, and farm organizations (Rainie, Purcell, & Smith, 2011). Studying all groups of any of the above categories would be costly and time consuming so a sample size should be determined. Sample size is often determined by study goals and cost ("Conducting

Survey Research,” 1999). If the target population is small an audit of the entire population may be conducted (“Conducting Survey Research,” 1999). The sample may be chosen as random, convenience, stratified random, or cluster. The random sample means everyone in the target population has an equal chance to be selected to take the survey (“Conducting Survey Research,” 1999). The convenience sample is one that is convenient yet the results may not necessarily be generalizable to a larger population, which works for studies such as this with the goal of surveying specific individuals whether or not they are representative of the larger population (“Conducting Survey Research,” 1999).

As stated earlier, young professionals generally have a strong online presence on social network sites such as Facebook (see Rainie, Purcell, & Smith, 2011). There are also young professional organizations with both an online and offline presence for this population. Three such organizations are young professional groups from Middletown (366 members), Watertown (799 members), and Lumbertown (376 members). The groups have similar missions in that they want to attract, engage, and retain young professionals in the specific region of this Midwest state. They host luncheons, seminars, and social events as part of their respective organizations. Their members are also invited to the city’s Chamber of Commerce events and regional events which include three young professional organizations in the area. They began as a face-to-face only organization. They have since incorporated the use of Facebook. On Facebook, the Middletown group began as a private organization where the site administration had to approve membership and became an open group in 2011. The Lumbertown group began as a closed group that accepted members by request only but is now an open group. The Watertown group is an open group where a person may “like” the organization’s page.

Table 1.1 – Group Description Synopsis

	Watertown's Young Professionals Network	Middletown's Young Professionals Network	Lumbertown's Young Professionals Network
Website	<p>Description: This young professional organization is a program of the Watertown Area Chamber of Commerce and works regionally with Middletown and Lumbertown YPN. Our mission is to attract, engage and retain young professionals in the greater Watertown area.</p> <p>Started: N/A Sponsors: 19 Board members: none identified Events: 7 (2012 spring/summer)</p>	<p>Description: Attract and retain talented young professionals by creating business opportunities, supporting community involvement and fostering an overall investment in the future of Middletown.</p> <p>Started: N/A Sponsors: N/A Board members: 21 Events: 16 (2012-2013)</p>	<p>Description: This young professionals network (YPN) is a program initiated by the Lumbertown County Chamber of Commerce. The mission of the Young Professionals Network is to support the attraction and retention of young talent to the region while developing the next generation of leaders.</p> <p>Started: N/A Sponsors: 13 Board members: 19 Events: 5 (2013 fall)</p>
Facebook	<p>Description: same as website Started: 2009 Likes: 504 Tabs: photos, events, membership July posts (1-19): 17 Post topics: club events, related articles</p>	<p>Description: same as website Started: 2008 Likes: 255 Tabs: photos, events July posts (1-19): 15 Post topics: club events, articles</p>	<p>Description: same as website Started: 2012 Likes: 199 Tabs: photos, events July posts (1-19): 3 Post topics: club events, community events and news, volunteering together</p>
Twitter	<p>Description: The mission is to attract, engage and retain young professionals in the greater Watertown area.</p> <p>Following: 105, Followers: 236 Tweets: 515 Topics: club events,</p>	<p>Description: Providing personal and professional development opportunities that enrich the lives of young professionals in the Middletown area.</p> <p>Following: 244 Followers: 272</p>	<p>Description: The Lumbertown YPN aims to attract and retain young talent to the Lumbertown area while developing the next generation of leaders- join us!</p> <p>Following: 3 Followers: 262</p>

	professional tips, articles, photos of events, casual comments (Happy x holiday, have a great weekend)	Tweets: 429 Topics: same as FB	Tweets: 12 (last post 2010) Topics: N/A
LinkedIn	Description: same as website Started: Feb. 2012 Group members: 52 Fields: marketing, banking, real estate, financial services, non-profits, accounting, sales, higher education, hospital Member location: 90% Job level: 35% (entry), 23% (senior), 12% (manager), 10% (owner), 8% (VP), 6% (director) Discussions: most recent Feb. 2012 Discussion topic: club event, member promoting their business	Description: same as website Started: 2009 Group members: 521 Fields: entrepreneurs, HR, marketing, operations, sales, finance, banking, chemicals, hospital, higher education Member location: 86% Job level: 29% (entry), 28 (senior), 16 (manager), 9 (owner), 7 (director), 4 (VP) Discussions: 1-3 per month Discussion topics: club events, articles	N/A

Design and Procedure

A survey questionnaire was used to gather information about social bonds and social network sites and answer these research questions. Social network sites can be used to make people feel connected to their friends or connections with little or no effort or engagement. Some may be satisfied viewing the activity of others without ever becoming involved in a conversation or activity. Others may only feel a connection by being heavily engaged with online

posts.

Conducting a survey is a systematic way to collect quantitative and/or qualitative data about a population (Johnson, 2011). A survey typically measures people's perceptions, opinions, knowledge, attitudes, behavioral intentions, and behavior using closed-ended or open-ended questions ("Conducting Survey Research," 1999). The survey should have clear and specific goals and may be conducted by face-to-face interview, telephone interview, mailed questionnaire or online questionnaire (Johnson, 2011; "Conducting Survey Research," 1999). If the population questioned is targeted correctly, the results may be generalizable to the larger populations ("Conducting Survey Research," 1999).

Some groups and organizations have moved online, presenting opportunities for researchers to access the populations of people affiliated with these groups (Wright, 2005). Researchers can access these groups to study people who share specific interests, attitudes, beliefs, values, interests or activities (Wright, 2005). It is possible to conduct a survey online using software or online survey services (Wright, 2005). An online survey has the potential to reach people in various locations, potentially reaching hard to contact people (Wright, 2005). Also, some of the online research tools automate data collection through email, HTML or database file, reducing the time researchers typically need to when performing a traditional paper survey (Wright, 2005).

Yet, online sampling is not without its problems (Andrews et al., 2003; Howard, Rainie, & Jones, 2002). For example, sometimes researchers are only able to determine basic demographic information about the sample of online communities, and it is possible that information may be unreliable (Dillman, 2000; Stanton, 1998). Even though some online groups require members to register with basic demographic information such as age, gender, email,

income, education, etc., and while administrators of these online groups may be willing to share this information with researchers, it should also be noted that there is no guarantee the registered members were honest in providing the demographic information (Wright, 2005). Also, not all group lists are organized enough that a researcher might obtain an email contact list of members or some group administrators may not be willing to provide researchers with contact information (Wright, 2005). It is also possible that members have multiple email addresses and would receive a survey multiple times or have an invalid/inactive email address and not receive a survey at all (Andrews et al., 2003; Couper, 2000).

Other issues with online surveys are the lack of registration by members, sporadic involvement of members, and lurkers. When trying to establish a sampling frame by counting the number of members participating in an online community, these issues can present a problem for researchers (Wright, 2005). Membership registration may not be required to become a member and there may not be a consistent amount of participation within the specific time period of the study (Wright, 2005). The groups included in the study do require membership and membership numbers did increase between the start and finish of the study. In order to avoid the issue of consistent participation, the study included a time period when there were face-to-face activities and Facebook postings for all groups studied. Also, members who can be considered “lurkers,” or members who read group postings but do not respond/members not visible to the rest of the group, may complete the survey (Wright, 2005). For the purposes of this study, lurker responses would be acceptable.

Finally, the fact that a large number of people may be reached with an online survey can present a problem. Response rate of online surveys may be difficult to track in large online communities (Andrews et al., 2003). Some researchers offer incentives such as prizes or a lottery

but that does not guarantee an increased response rate (Wright, 2005). There is also the possibility that respondents are desensitized to survey requests by advertisers who also offer some type of payment for responses (Wright, 2005). No prize was offered to respondents although one group administrator suggested that for his/her members. A systematic bias results when some people have a tendency to ignore such survey requests while others respond to all such survey requests (Wright, 2005). In order to present the survey as a valid research tool, a researcher may provide his/her contact information, request permission from the administrator to survey members, and offer to share results (Wright, 2005). There is the possibility that those who feel the survey is an invasion of privacy will send hate email to the researcher while others will welcome learning more about their community (Wright, 2005). The researcher for this study did not receive any hate mail. Despite the issues an online survey may face, due to the nature of this project, an online survey was used. In order to avoid these issues the researcher worked with the group administrators so that group members would be less likely to ignore the survey. The researcher also, at the request of the administrators, joined each group and discovered that the groups receive few, if any, survey requests.

The members Middletown, Watertown, and Lumbertown groups can be reached through the group Facebook page and by working with the Facebook page administrator. Not knowing how engaged the members are with the group Facebook page, two methods will be used to reach members. First, members will be contacted and presented the survey through the Facebook page. They will also receive the survey through the email they provided to the administrator. Both forms of contact are predicated on the permission and assistance of the administrator. Members first received the survey the last part of April, with follow-ups two weeks after the first contact attempt. All data was collected by the end of May, with data analysis occurring in June through

August and the final report completed in late fall/early winter.

Measurement

Survey items one through five in Appendix A, B and C focus on a person's connection with others and how social network sites might be involved, addressing research question one. Survey item one will address the variable of goals – when people join groups with similar goals to theirs, social bonds are forged and, eventually, group goals are met. The more similar the member's goals are to the goals of the group the more likely stronger bonds are formed. The less similar the member's goals are to the goals of the group the less likely strong bonds are formed.

Survey item two addresses the variable of shared experiences – when group members share experiences they strengthen their bonds within the group. If the group offers opportunities for members to share experiences then members have a greater chance to develop bonds. The more often the members share experiences within the group, the more likely they will develop strong bonds. The less often the members share experiences within the group, the less likely they will develop strong bonds.

Survey item three addresses the variable of trust within the group. When group members believe the others in the group are trustworthy, there is greater potential to develop strong bonds. When group members believe the others in the group are not trustworthy, there is less potential to develop strong bonds.

Survey item four addresses the variable of asking for help – that those with strong bonds within a group feel comfortable asking group members for help. The more likely the member is to ask for help of other group members, the more likely they have strong bonds within the group. The less likely a member is to ask for help of other group members, the less likely they have strong bonds.

Survey item five is a mechanism question addressing the social network site. It will determine whether or not respondents believe that social network sites make it easier to build strong connections with a group or if social network sites have no effect on building social bonds.

Survey items 6-13 will address research question two. Questions 6-10 will address the variable of social engagement. There are different levels of engagement. For example, reading a post (question nine) would be considered low-level engagement, posting a comment (question eight) or “liking” a post (question seven) would be considered mid-level engagement, and organizing an event (question ten) or attending an event (question six) would be considered high-level engagement. These items will ask about specific posts within a specific timeframe and the action taken, if any, by the responder toward the post – read, like, comment, create or attend. The results would highlight if a member was a lurker (reading), engaged member (posting) or leader (organizing).

Survey items 11 and 13 will address the variable of time. They may or may not determine a correlation to the amount of time spent using social network sites and level of engagement. Survey item 11 asks how often respondents are involved with the social network site while survey item 13 asks respondents how much time they spend with the social network site once online. There is the possibility that the most engaged members spend the most time on the sites while the least engaged members spend the least amount of time. There is also the possibility that a lurker could spend hours on the sites and a leader could spend a short but productive amount the sites.

Survey item 12 is a mechanism question addressing the social network site. It will determine if the sites are impacting (positively, negatively or not at all) the amount of time

someone spends in a social, civic, professional, religious or spiritual group.

Survey items 14 through 17 will address research question three. Survey item 14 is a mechanism question addressing the social network site. It will determine whether or not respondents believe that social network sites make it easier to be active in a greater number of groups or if social network sites have no effect on the number of groups they can be involved with.

Survey item 15 addresses the variable of goal accomplishment – that, in addition to joining groups, group members may or may not be accomplishing the goals of the group. If group members report accomplishing group goals then they are considered to have greater social capital than those who report not accomplishing group goals.

Survey item 16 will address the variable of group membership – the social capital idea that the more groups a person is involved with, the more social capital he/she has. The results of this question indicate that the greater number of groups a person is involved with, the greater number of connections the person has and the greater the social capital.

Survey item 17 addresses the variable of personal connections – the social capital idea that the greater number of people a person is connected to, the greater the person's social capital. For example, belonging to a group with five members would result in less social capital than belonging to a group with 50 members.

Survey items 18 to 22 gathered demographic information of the respondents. These questions will determine the makeup of the online communities.

Questions were developed for a survey questionnaire for this project and a pre-test of those questions was conducted. The survey questionnaire was given to 12 people who do not belong to the groups the study is targeting yet they could belong to the young professional

groups if they lived in the area. They were given a week to complete the survey questionnaire and asked to not only answer the questions but provide feedback on the questions. This provided valuable insight into the questions and some questions were modified and more detailed instructions were developed. Based on this insight several questions were eliminated due to the fact that there were stronger questions that would answer the research questions and a survey with too many questions may not be completed. The deleted questions asked about responder's feeling disappointed in a group, feeling proud of belonging to a group, feeling obligated to join a group and deciding to end a membership based on a group not meeting expectations. Several questions were altered based on results of the pre-test in order to make them stronger and easily understandable to respondents. The original survey question three asked about trust and provided yes or no answer options. The question was not worded so the yes or no option was a logical response. Question three now is a Likert-scale question. The original survey question 11 was open-ended, asking respondents the number of groups they belong to with social network sites. Respondents did not provide a single answer, instead answering a range or stating "about six." The question's answer options are now several ranges. Original survey question 12 confused respondents as worded. They did not know if the question was asking about the number of friends they had in a social network or the number of members within the specific group. The question now specifies that respondents are to answer about group members and not friends.

Data Analysis

The survey will be distributed through SurveyMonkey and the data will be downloaded into SPSS for analysis. The data will be used to answer the three research questions using the theory of complementarity. This theory does not suggest causality, but suggests that people who are engaged in their local communities will be found to be engaged similarly online (Dutta-

Bergman, 2005). The information gathered will be used to determine the role of social network sites in people's building of social capital using the PRI Conceptual Framework. In determining the level of social capital the PRI Conceptual Framework developed social capital elements that can be measured (Franke, 2005). To determine if there is the presence of social capital in the structural properties of a network researchers need to know the size of the network (number of connections), the density of the network (interconnections between members), the frequency of contact (number and length of contacts), and spatial proximity (face-to-face interactions) of network members (Franke, 2005). In order to determine if there is functioning social capital present the PRI Conceptual Framework considers network dynamics and the external context in which social capital operates (Franke, 2005). For network dynamics, researchers need to consider the mobilization of networks (support/resources) and the norms and rules (i.e. trust, belonging, etc.) of the network (Franke, 2005). For the social capital's external context, researchers need to consider the structure of the network or the formal/informal institutional arrangements that facilitate relationships or not (Franke, 2005). For the purposes of this study social capital will be measured by tracking the number of connections and the amount of engagement of actors within a network or group. As with previous studies in social capital, the greater the number of connections and amount of engagement, the greater the actor's social capital. In using a tool such as this, the project is able to determine the level of social bond, engagement, and social capital is possible with a specific young professional organization(s).

Table 2: Study Summary

Research Question	Variables	Statistical Analysis
RQ 1 – Do users of social network sites report that use reinforces social bonds and if so what mechanisms do they report as reinforcing social bonds?	<p><u>Social bonds</u></p> <ul style="list-style-type: none"> • Similar individual and group goals • Shared experiences • Trust • Willingness to ask for help <p><u>Social Capital</u></p> <ul style="list-style-type: none"> • Accomplished a group goal • Number of group connections • Number of connections with group members <p><u>Time online</u></p> <p><u>Time using social network site</u></p>	<p>The data from survey items one (goals), two (shared experiences), three (trust), and four (ask for help) will be summed to determine the level of social bond within the group.</p> <p>A one-way ANOVA will determine if any of the three groups surveyed were significantly different from each other in terms of social bonds.</p> <p>A two-way ANOVA will examine the effect of age and city on social bonds.</p> <p>In addition, a two-way ANOVA will examine the effect of gender and city on social bonds.</p> <p>A chi-square test will examine research question one and research question three and the association between social bonds (RQ1) and social capital (RQ2).</p>
RQ 2 – Do users of social network sites report that this form of communication facilitates social engagement and if so what mechanisms do they report as facilitating social engagement?	<p><u>Social engagement</u></p> <ul style="list-style-type: none"> • Like • Post • Read • Create • Attend <p><u>Time online</u></p> <p><u>Time using social network</u></p>	<p>The data from survey items six (attend), seven (like), eight (comment), nine (read), and ten (create) will be summed to determine the responder's level of engagement.</p>

	<u>site</u>	
RQ 3 – Do members report that using social network sites contribute to their social capital and if so what mechanisms do they report as contributing to social capital?	<p><u>Social capital</u></p> <ul style="list-style-type: none"> • Accomplished a group goal • Number of group connections • Number of connections with group members <p><u>Time online</u></p> <p><u>Time using social network site</u></p>	<p>The data from survey items 15 (goal accomplishment), 16 (number of group connections), and 17 (number of member connections) will be summed to determine the level of social capital within the group.</p> <p>A one-way ANOVA will determine if any of the three groups surveyed were significantly different from each other in terms of social capital.</p> <p>A two-way ANOVA will examine the effect of age and city on social capital.</p> <p>In addition, a two-way ANOVA will examine the effect of gender and city on social capital.</p> <p>A chi-square test will examine research question one and research question three and the association between social bonds (RQ1) and social capital (RQ2).</p>

Assessing the variable of goals, shared experiences, trust, and asking for help will answer research question one. The variables will be assessed separately and summed and evaluated as a group. If the results indicate high levels of trust, sharing, and assistance seeking then those respondents have a greater social bond within the group. If there are low levels of trust, sharing, and assistance seeking then those respondents have a weaker social bond within the group. It is

beyond the scope of this study to determine if the respondents were seeking strong or weak social bonds within the group. People give advice, share information, and gain trust through the relationships in a social network (Wellman & Berkowitz, 1988). A one-way ANOVA was conducted to determine if significant differences existed between any of the three groups in terms of social bonds. A two-way ANOVA was conducted to examine the effect of age and city on social bonds and the effect of gender and city on social bonds.

The survey questions developed to answer research question two (questions 6-12) considered the fact that there can be various levels of social engagement – low, mid, and high level. Respondents may read, like, post or create within the social media group. Reading will be considered low-level engagement, liking or posting will be considered mid-level engagement and creating will be considered high-level engagement. Assessing these variables will answer research question two. The variables will be assessed separately and summed and evaluated as a group.

Assessing the variable of goal accomplishment, group connections, and member connections will answer research question three. The variables will be assessed separately and summed and evaluated as a group. If the results indicate members accomplish goals and that they have a large number of individual and group connections then those respondents have greater social capital. If goals are not accomplished and there are few individual and group connections there is weaker social capital. The social capital is built by being part of social activities and is transferable to other social settings due to the ties, norms, and trust of the participants (Putnam, 1993). Trust and general reciprocity facilitates social life (Putnam, 1993). A one-way ANOVA was conducted to determine if significant differences existed between any of the three groups in terms of social bonds. A two-way ANOVA was conducted to examine the effect of age and city

on social capital and the effect of gender and city on social capital. A chi-square test was conducted to examine research question one and research question three and the association between social bonds (RQ1) and social capital (RQ2).

The mean and standard deviation of these questions will then be used to assess the variability in the factors of goals, shared experiences, trust and, asking for help for research question one; liking, posting, reading, creating, and time online for research question two; goal accomplishment, group connection, and member connection for research question three.

In order to determine the relationship between face-to-face interaction (attending an event specified in the survey – question 6) and interaction within the social network site (like, post, read or create a post – questions 7-10) the data will be examined for each event in a specified time period. These results can also be compared between the three groups surveyed to determine any similarities among the groups in regards to their face-to-face versus social network site interaction. Due to the fact that these questions will be unique to each group, descriptive statistical analysis will be performed.

The demographic questions will provide information about survey participants. The demographic information will be used to determine the makeup of age, gender, education, ethnicity/race, and employment status of the respondents of the online social network groups.

CHAPTER 3

RESULTS

This project was designed to explore the perceptions of social bonds, social engagement and social capital by users of social network sites, specifically Facebook. Three Midwest organizations for young professionals were studied. This chapter will highlight the results of the survey questionnaire. The first section presents demographic information regarding the cities where these organizations are located. The results of the survey questionnaire are presented according to the three research questions.

An online survey was administered to the three young professional organizations with both a face-to-face and Facebook presence. These groups were chosen because the groups themselves are fundamentally similar yet the demographics of the cities are differences. A total of 166 surveys were returned from Watertown ($n = 55$), Middletown ($n = 78$), and Lumbertown ($n = 33$). The survey was posted on each group's Facebook page by the group's administrator. The researcher then posted a reminder about completing the survey. The survey was sent to the 799 Watertown, 366 Middletown, and 376 Lumbertown Facebook users/ group members. The survey return rates were – Watertown 7%, Middletown 21%, and Lumbertown 9%. Demographic characteristics are described below.

Demographic Features

Watertown and Lumbertown populations are below the state average in term of education but Middletown is above average (see Table 1.3). In this Midwest state, 25.5% of residents have earned a bachelor's degree or higher (see Table 3.3). Survey respondents specifically, reported having a bachelor's degree or higher – Watertown (82%), Middletown (90%), and Lumbertown

(88%). This was not unexpected because the targeted groups were young professionals associated with organizations.

The median income for this Midwest state is \$48,000 (see Table 3.3). Watertown and Lumbertown populations are below the state average and Middletown is above the average (see Table 3.3). The average poverty level for This Midwest state (2008-12) is 16.3%. Watertown and Middletown are lower than the average while Lumbertown is above the average. Survey respondents from each city reported working full (Watertown, 95%; Middletown, 99%; Lumbertown 91%) or part-time (Watertown, 5%; Middletown 1%; Lumbertown 9%). The commute time for each city is similar, 20-22 minutes, which may be significant to interpreting these results.

The young professionals in each of these cities have the option of joining a community based young professional group. The mission of these three groups is the same: to support the attraction and retention of young talent to the region while developing the next generation of leaders. Each group is open to the early 20s to early 40s age demographic. These groups are an extension of the city Chamber of Commerce. Watertown members pay an annual \$30 fee while Lumbertown offers a lifetime membership for a one-time fee of \$50 and Middletown offers free membership if the employer is a chamber member. Individual events and regional events are offered for the members of all three groups. All used Facebook (Watertown since 2009, Middletown since 2008, and Lumbertown since 2012), as a primary form of social media. Watertown has the most “likes” on their Facebook page (799), followed by Lumbertown (376) and Middletown (366) (see Table 3.1). It is interesting to note that while the overall population of Middletown and Lumbertown differs by more than 100,000, their group membership size is

similar to one another (Middletown 366 and Lumbertown 376). Demographic data are presented in tables 3.1 – 3.4. This will be discussed further in the following chapters.

Demographics Tables

Table 3.1 Populations of Watertown, Middletown, and Lumbertown and Young Professional Group Membership

	City	Young Professionals/ Members on Facebook
Watertown	107,000	799
Middletown	84,000	366
Lumbertown	197,000	376

(Source: The United States Census Bureau, 2010)

Table 3.2 Race of Watertown, Middletown, and Lumbertown and Young Professional Group Membership

	Watertown	YP Club	Middletown	YP Club	Lumbertown	YP Club
White	95%	94%	94%	94%	76%	55%
Black	2%	4%	1%	0%	19%	30%
Hispanic	5%	2%	2%	4%	8%	12%
Asian	1%	0%	2%	1%	1%	0%
Native American	1%	0%	.5%	0%	.5%	0%

(Source: The United States Census Bureau, 2010)

Table 3.3 Education, Income, Gender, Commute Time of Watertown, Middletown, and Lumbertown and Young Professional Group Membership

	Watertown	YP Club	Middletown	YP Club	Lumbertown	YP Club
Education (Bachelor's degree or higher)	18.6%	82% (45)	32.2%	90% (70)	18.8%	88% (29)
Income (median 2008-12)	\$46,000	N/A	\$53,000	N/A	\$43,000	N/A
Gender	50.8% female	56.4% female	50.9% female	55.1% female	51.5% female	45.5% female
Commute time	21 minutes	N/A	20 minutes	N/A	22 minutes	N/A
Poverty (2008-12)	13.5%	N/A	12.2%	N/A	18.7%	N/A

(Source: The United States Census Bureau, 2010)

Table 3.4 Age of Young Professional Group Membership

	Watertown (county median age 35.8 years)	Middletown (county median age 38.3 years)	Lumbertown (county median age 33.5 years)
20-24	2	9	1
25-29	13	29	6
30-34	18	24	16
35 and older	22	15	10
Total respondents	55	77 (1 skipped age question)	33

(Source: City-Data.com, 2014)

Survey Results

A one-way ANOVA, two-way ANOVA and Chi-square analysis was conducted using the survey data to answer research questions one and three. Survey questions that address research question three were specific to each individual group so it was not possible to conduct the same analysis for these questions. The questions asked respondents about specific posts and these posts were categorized and analyzed as a whole and within gender and age categories to discover any significant differences among the groups.

Research Question #1

The first research question asked whether users of social network sites, specifically Facebook, report that use reinforces members' social bonds and if so what mechanisms do they report as reinforcing social bonds. In order to answer that question respondents were asked about goals, trust, willingness to ask for help and if the group's Facebook page positively or negatively affects the ability for members to connect with one other. Data was collected using a 5-point Likert-type scale ranging from very likely to not at all likely.

Descriptive Statistics

Table 3.5 Watertown Descriptive Statistics based on a 5-point Likert-type scale

	Goals	Opportunities to Connect	Trust	Help	Ease of Communication
Mean	2.13	2.13	2.10	2.35	2.00
Standard Error	0.12	0.13	0.12	0.167	0.12
Median	2.00	2.00	2.00	2.00	2.00
Mode	2.00	2.00	2.00	2.00	2.00
Standard Deviation	0.86	0.98	0.89	1.24	0.86
Sample Variance	0.74	0.96	0.80	1.53	0.74
Range	4	4	3	4	3
Minimum	1	1	1	1	1
Maximum	5	5	4	5	4
Sum	117	117	116	129	110
Count	55	55	55	55	55

Table 3.6 Middletown Descriptive Statistics based on a 5-point Likert-type scale

	Goals	Opportunities to Connect	Trust	Help	Ease of Communication
Mean	2.29	2.29	1.89	2.64	2.36

Standard Error	0.11	0.09	0.09	0.15	0.129
Median	2.00	2.00	2.00	2.00	2.00
Mode	2.00	2.00	2.00	2.00	2.00
Standard Deviation	0.98	0.84	0.78	1.31	1.14
Sample Variance	0.96	0.70	0.61	1.71	1.29
Range	4	4	3	4	4
Minimum	1	1	1	1	1
Maximum	5	5	4	5	5
Sum	179	179	148	206	184
Count	78	78	78	78	78

Table 3.7 Lumbertown Descriptive Statistics based on a 5-point Likert-type scale

	Goals	Opportunities to Connect	Trust	Help	Ease of Communication
Mean	1.76	2.27	2.21	2.15	1.30
Standard Error	0.18	0.17	0.17	0.19	0.13
Median	1.00	3.00	3.00	3.00	1.00
Mode	1.00	3.00	3.00	3.00	1.00
Standard	1.03	0.98	0.99	1.12	0.73

Deviation					
Sample Variance	1.06	0.95	0.98	1.26	0.53
Range	3	2	2	4	2
Minimum	0	1	1	1	1
Maximum	3	3	3	5	3
Sum	58	75	73	71	43
Count	33	33	33	33	33

The mean scores for Watertown respondents showed little variability for survey items 1-5 (see table 3.5). The standard deviation for survey items 1, 2, 3, 5 (goals, opportunities to connect, trust and ease of communication) were also similar. There was a larger standard deviation (1.24) for survey item 4 (asking other members for help). Respondents may share similar feelings about goals, communicate and trust other members, but are not as willing to ask for help from other members.

The mean scores for Middletown respondents showed little variability for survey items 1 (goals), 2 (opportunities to connect), and 5 (ease of communication) (see table 3.6). The mean was lower for survey item 3 (trust) and higher for survey item 4 (asking for help). They may be more trusting but are still less likely to ask for help.

The standard deviation for survey items 1, 2, 3, 5 (goals, opportunities to connect, trust and ease of communication) were similar (see table 3.6). There was a larger standard deviation (1.31) for survey item 4 (asking other members for help). As with Watertown, Middletown

respondents may share similar feelings about goals, communicate and trust other members, but are not as willing to ask for help from other members.

The mean scores for Lumbertown showed little variability for survey items 1-4 (see table 3.7). The mean was lower for survey item 5 (ease of communication). Respondents report that Facebook aids in communication with other members. The standard deviation for survey items 1, 2, 3, 4 (goals, opportunities to connect, trust and asking for help) were similar. There was a smaller standard deviation (0.73) for survey item 5 (ease of communication). So, respondents reported a similar view that Facebook allows them to easily communicate with each other.

One-Way ANOVA

A one-way ANOVA was conducted to determine if significant differences existed between any of the three groups in terms of social bonds.

Table 3.8 One-Way ANOVA City (Lumbertown, Middletown and Watertown)

Source	DF	SS	MS	F	P
Factor	2	1733	866	3.33	0.05
Error	42	10912	260		
Total	44	12645			

Table 3.9 One-Way ANOVA Gender

Source	DF	SS	MS	F	P
Factor	17	6263.30	368.43	51.33	0.00
Error	72	516.80	7.18		
Total	89	6780.10			

Table 3.10 One-Way ANOVA Age

Source	DF	SS	MS	F	P
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Factor	35	4843.98	138.40	27.42	0.00
Error	144	726.80	5.05		
Total	179	5570.78			

A statistically significant difference was found between the cities of Middletown and Lumbertown, $p < 0.05$. These differences may exist due the demographic differences of these two cities with two main employers in Middletown and a variety of employers in Lumbertown. Respondents from Middletown may share the same employer, increasing the opportunity to build social bonds while respondents from Lumbertown may only have the chance to build social bonds when the group hosts activities or online engagement opportunities.

Two-Way ANOVA

A two-way ANOVA was conducted to examine the effect of age and city on social bonds and the effect of gender and city on social bonds. The survey questionnaire items were Likert-type and the answers were grouped as positive (answer A) or negative (answer B) and the two-way ANOVA tests were conducted for each. The independent variables for the tests were city, gender, and age. The dependent variables for the tests were combined survey items one through five that reflected the social bond variable, positive answers (answer A), and negative answers (answer B).

Table 3.11 Two-Way ANOVA Gender and City (independent variable) answer A (dependent variable)

Source	DF	SS	MS	F	P
Row-City	2	1394.87	697.43	48.66	0.00
Gender	1	168.03	168.03	11.72	0.00
Interaction	2	58.07	29.03	2.03	0.154
Error	24	344.00	14.33		
Total	29	1964.97			

Table 3.12 Two-Way ANOVA Gender and City (independent variable) answer B (dependent variable)

Source	DF	SS	MS	F	P
Row-City	2	56.87	28.4333	2.69	0.08
Gender	1	0.83	0.8333	0.08	0.78
Interaction	2	62.07	31.0333	2.94	0.07
Error	24	253.60	10.5667		
Total	29	373.37			

Table 3.13 Two-Way ANOVA Age and City (independent variable) answer A (dependent variable)

Source	DF	SS	MS	F	P
Row-City	2	830.80	415.400	58.58	0.00
Age	3	970.53	323.511	45.62	0.00
Interaction	6	315.87	52.644	7.42	0.00
Error	48	340.40	7.092		
Total	59	2457.60			

Table 3.14 Two-Way ANOVA Age and City (independent variable) answer B (dependent variable)

Source	DF	SS	MS	F	P
Row-City	2	14.233	7.1167	1.05	0.36
Age	3	283.917	94.6389	13.95	0.00
Interaction	6	261.233	43.5389	6.62	0.00
Error	48	325.600	6.7833		
Total	59	884.983			

There was a significant statistical difference between the cities of Middletown, Lumbertown and Watertown (answer A), $p < 0.05$, with Middletown reporting the strongest social bonds followed by Watertown then Lumbertown. There was also a significant statistical difference between men and women (answer A), $p < 0.05$, with women reporting stronger social bonds. These results coincide with previous research findings of women reporting stronger social bonds in their use of social network sites.

There was also a significant statistical difference ($p < 0.05$) between the 20-24 age group and the 25-29, 30-34 and 35 and up age groups with the older age groups reporting stronger social bonds. There was also a significant statistical difference ($p < 0.05$) between the 25-29 age group and the 30-34 age group with the 30-34 age group claiming stronger social bonds. This may be that those in the older age group have increased job, home, and family responsibilities when compared to the younger age groups and it may be easier for older age groups to create and maintain social bonds using social network sites.

There was also evidence of an interaction between gender and city, $p < 0.05$. There was an interaction for Watertown women, but not for the women in Middletown and Lumbertown indicating a significant gender effect on social bonds. This coincides with previous research that reports women use social network sites to build social bonds but it may not be a universal conclusion as the interaction did not occur for all three cities.

When conducting a two-way ANOVA to examine the effect of age and city, there was an interaction between age and city, $p < 0.05$. There was an interaction for the Watertown 25-29 age group, but not for the 25-29 age group of Middletown and Lumbertown. There was an interaction for the Middletown 30-34 age group, but not for the 30-34 age group of Watertown and Lumbertown. This indicates a significant age effect on social bonds at least in some contexts.

Summary Research Question 1

In general, the respondents from each young professional group reported that their personal goals coincide with the group's goals, that they trust fellow groups members, are willing to ask fellow members for help and that the group's Facebook page allows members to

connect with each other. Middletown reported stronger social bonds than Lumbertown possibly due to demographics such as the employment opportunities for each town. Women and the 25-29 and 30-34 age groups also reported stronger social bonds than men and the 20-24 age group respectively.

Research Question #2

The second research question explores whether users of social network sites report that this form of communication facilitates social engagement and if so what mechanisms do they report as facilitating social engagement. In order to answer that question respondents were asked about specific posts that were visible on the public wall of the group's Facebook page and specific face-to-face events during a two-week time period. Respondents were asked if they read, liked, commented, created a post or attended a face-to-face event. During that time, Watertown made 15 posts and had two face-to-face event opportunities, Middletown made 17 posts and had three face-to-face event opportunities, and Lumbertown made 3 posts and had one face-to-face opportunity.

The posts were categorized by type – Events, Holiday, Photos, Professional and Shared. Not all groups created a post for each category. The predominant post type for each group was Events and it should be noted that Lumbertown only posted about Events.

Table 3.15 Facebook Posts for Young Professional Clubs between July 1-17, 2013

Post Type	Watertown					Middletown					Lumbertown				
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
Events	10	72	26	161	2	9	59	15	154	0	3	45	7	80	0
Holidays	1	14	8	25	1	0	0	0	0	0	0	0	0	0	0
Photos	1	8	1	27	1	1	10	2	20	0	0	0	0	0	0
Professional	3	30	7	68	0	6	35	4	108	0	0	0	0	0	0
Shared post	0	0	0	0	0	1	17	3	22	0	0	0	0	0	0

None		28	36	14	48		47	65	30	75		13	26	3	33

A = Post type

B = Like

C = Comment

D = Read

E = Create

As shown in table 3.15, respondents reported that they were most likely to read a post, followed by liking, then commenting on a post. Only participants from Watertown reported that they created a post.

Table 3.16 Face-to-Face Events Attended by Young Professional Clubs between July 1-17, 2013

Event	Watertown	Middletown	Lumbertown
Regional Event	14	10	11
Ribbon Cutting	10	0	0
Golf Event	0	15	0
Chamber Event	0	23	0
None	39	47	22

For Middletown 62% of respondents were the most likely to attend an event (see Table 3.16). As shown in table 3.9, 53% of Watertown respondents and 34% of Lumbertown respondents attended an event.

Table 3.17 Facebook Post Likes by Young Professional Clubs between July 1-17, 2013, Organized by Gender

Post Types	Watertown – Gender		Middletown – Gender		Lumbertown – Gender	
	M	F	M	F	M	F
Events	20	39	18	37	19	25
Holiday	6	8	0	0	0	0
Photos	4	4	5	5	0	0
Professional	12	18	13	22	0	0
Shared post	0	0	8	9	0	0

None	13	25	20	27	9	4
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As reported in table 3.17, in all cities women were more likely to like a post than men. This finding is consistent with previous studies that found women are more likely to use social network sites to foster social bonds.

Table 3.18 Facebook Post Comments by Young Professional Clubs between July 1-17, 2013, Organized by Gender

Post Types	Watertown – Gender		Middletown – Gender		Lumbertown – Gender	
	M	F	M	F	M	F
Events	17	9	5	10	3	4
Holiday	5	3	0	0	0	0
Photos	1	0	0	2	0	0
Professional	3	4	0	2	0	0
Shared post	0	0	0	3	0	0
None	16	20	29	36	15	11

Women from Middletown and Lumbertown were more likely to comment on a post while Watertown men were more likely to comment (see Table 3.18).

Table 3.19 Facebook Posts Read by Young Professional Clubs between July 1-17, 2013, Organized by Gender

Post Types	Watertown – Gender		Middletown – Gender		Lumbertown – Gender	
	M	F	M	F	M	F
Events	48	67	51	101	44	36
Holiday	5	3	0	0	0	0
Photos	1	0	8	12	0	0
Professional	36	32	34	72	0	0
Shared post	0	0	7	14	0	0
None	5	9	13	17	2	12

As reported in table 3.12, men from Lumbertown were more likely than women to read a post while Middletown women were more likely than men to read a post. Watertown varied

based on post topic with women reading more about events and men reading more about holidays, photos and professional topics (see Table 3.19).

Table 3.20 Facebook Posts Created by Young Professional Clubs between July 1-17, 2013, Organized by Gender

Post Types	Watertown – Gender		Middletown – Gender		Lumbertown – Gender	
	M	F	M	F	M	F
Events	0	2	0	0	0	0
Holiday	0	1	0	0	0	0
Photos	0	0	0	0	0	0
Professional	0	1	0	0	0	0
Shared post	0	0	0	0	0	0
None	22	26	33	42	18	15

Women from Watertown were the only group ones who indicated that they created a post (7%). No one in Middletown or Lumbertown reported creating a post (see table 3.20). The posts that were displayed were created by the group's respective administrators rather than group members.

Table 3.21 Face-to-Face Events Attended by Young Professional Clubs between July 1-17, 2013, Organized by Gender

Post Types	Watertown – Gender		Middletown – Gender		Lumbertown – Gender	
	M	F	M	F	M	F
Regional Event	7	7	7	3	6	5
Ribbon Cutting	5	5	0	0	0	0
Golf Event	0	0	6	9	0	0
Chamber Event	0	0	9	12	0	0
None	17	22	19	28	12	10

Of the three events options available to them, women from Middletown were more likely to attend a golf outing or city chamber event while men were more likely to attend a regional event (see Table 3.21). The regional event was a three hour boat ride social/networking program

hosted jointly by the three young professional groups. As reported in table 3.21, Watertown men and women were equally likely to attend a regional event or ribbon cutting, the two event options available to them. Lumbertown members were only given one option to attend an event and men were slightly more likely to attend the regional event than women (see Table 3.21).

Table 3.22 Facebook Posts Liked by Young Professional Clubs between July 1-17, 2013, Organized by Age

Post Types	Watertown – Age				Middletown – Age				Lumbertown – Age			
	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up
Events	1	22	19	25	3	35	15	4	3	10	22	9
Holiday	1	5	4	3	0	0	0	0	0	0	0	0
Photos	0	3	1	4	2	3	3	2	0	0	0	0
Professional	1	9	9	10	1	13	14	6	0	0	0	0
Shared post	0	0	0	0	1	8	5	2	0	0	0	0
None	1	5	10	12	6	10	21	10	0	1	8	4

Table 3.22 indicated that the majority of respondents in Watertown who liked a post were 35 and up, the majority of people who liked a post in Middletown were either 25-29 or 35 and up, and the majority of people in Lumbertown who liked a post were age 30-34.

Table 3.23 Facebook Posts Comment on Young Professional Clubs between July 1-17, 2013, Organized by Age

Post Types	Watertown – Age				Middletown – Age				Lumbertown – Age			
	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up
Events	1	14	5	5	1	8	5	0	0	2	4	6
Holiday	0	4	1	2	0	0	0	0	0	0	0	0
Photos	0	3	2	2	0	1	1	0	0	0	0	0
Professional	0	1	0	0	0	1	13	0	0	0	0	0
Shared post	0	0	0	0	0	1	2	0	0	0	0	0
None	1	7	12	16	6	19	26	15	1	3	12	4

The majority of respondents in Watertown who commented on a post were 25-29, the majority of respondents who commented most in Middletown were either 25-29 or 30-34, and

the majority of respondents in Lumbertown who commented on a post were 35 and up (see Table 3.23).

Table 3.24 Facebook Posts Read by Young Professional Clubs between July 1-17, 2013, Organized by Age

Post Types	Watertown – Age				Middletown – Age				Lumbertown – Age			
	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up
Events	10	50	45	59	13	74	44	16	3	16	41	21
Holiday	1	6	6	12	0	0	0	0	0	0	0	0
Photos	1	5	7	13	2	9	5	2	0	0	0	0
Professional	3	20	20	25	6	46	37	17	0	0	0	0
Shared post	0	0	0	0	2	10	7	3	0	0	0	0
None	1	5	5	2	5	8	13	4	0	0	1	2

The majority of respondents in Watertown who reported reading a post were 35 and up, the majority of respondents who reported reading a most in Middletown were 25-29, and the majority of respondents in Lumbertown who reported reading a post were 30-34 (see Table 3.24).

Table 3.25 Facebook Posts Created by Young Professional Clubs between July 1-17, 2013, Organized by Age

Post Types	Watertown – Age				Middletown – Age				Lumbertown – Age			
	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up
Events	0	0	0	2	0	0	0	0	0	0	0	0
Holiday	0	0	1	0	0	0	0	0	0	0	0	0
Photos	0	0	0	0	0	0	0	0	0	0	0	0
Professional	0	0	0	1	0	0	0	0	0	0	0	0
Shared post	0	0	0	0	0	0	0	0	0	0	0	0
None	2	11	16	19	7	23	30	15	1	6	16	10

The majority of respondents in Watertown who created a post were either age 30-34 or 35 and older while no responder from Middletown or Lumbertown indicated that they had

created a post (see Table 3.25). This indicates that the majority of posts were uploaded by group administrator rather than members.

Table 3.26 Face-to-Face Events Attended by Young Professional Clubs between July 1-17, 2013, Organized by Age

Post Types	Watertown – Age				Middletown – Age				Lumbertown – Age			
	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up	20-24	25-29	30-34	35-up
Regional Event	1	5	3	5	1	6	2	1	1	2	6	2
Ribbon Cutting	1	3	2	4	0	0	0	0	0	0	0	0
Golf Event	0	0	0	0	2	6	5	2	0	0	0	0
Chamber Event	0	0	0	0	4	6	12	1	0	0	0	0
None	2	4	3	5	4	12	20	11	0	4	10	8

As reported in table 3.26, of the two event options available to Watertown members, the 25-29 and 35 and older age groups were equally likely to attend the regional event, and the 35 and older group was most likely to attend a ribbon cutting. Middletown members had three event opportunities and the 25-29 age group was most likely to attend the regional event and golf event (see Table 3.26). The 30-24 age group was most likely to attend a chamber event (see Table 3.26). The Lumbertown member had one event opportunity and the 30-34 age group was most likely to attend the regional event (see Table 3.26).

Summary Research Question 2

The level of engagement members of each club varies between clubs, gender and age. The options for engagement from lowest to highest level were reading a post, liking a post, commenting on a post, creating a post and attending a face-to-face event. Middletown, Watertown, and Lumbertown respondents were most likely to read posts. Who was reading the posts for each group with regard to age and gender varied based on the topic of the post. Respondents from each group “liked” posts with Middletown reporting slightly more “likes”

than Watertown and Lumbertown. Watertown respondents reported posting more comments than Middletown and Lumertown with Watertown men posting the majority of comments and Middletown and Lumbertown women posting the majority of comments. Only Watertown women reported creating a post. Middletown respondents were most likely to attend a face-to-face event. Overall, Middletown respondents were most likely to read and like a post and attend a face-to-face event while Watertown respondents were most likely to comment and create a post.

Research Question #3

The third research question asks whether members report that using social network sites contributes to their social capital and if so what mechanisms do they report as contributing to social capital. In order to answer that question respondents were surveyed about how likely they are to join a group due to their social media presence, how many goals they have accomplished with the group, how many individual connections they have within the group and how many groups in which they are members.

Descriptive Statistics

Table 3.27 Watertown Descriptive Statistics

	Likely to join Groups	Accomplished a goal	Group connections	Individual connections
Mean	2.53	1.69	1.87	2.16
Standard Error	0.14	0.06	0.14	0.22
Median	3.00	2.00	2.00	1.00

Mode	3.00	2.00	1.00	1.00
Standard Deviation	1.05	0.47	1.037	1.64
Sample Variance	1.11	0.22	1.08	2.69
Range	4	1	3	4
Minimum	1	1	1	1
Maximum	5	2	4	5
Sum	139	93	103	119
Count	55	55	55	55

Table 3.28 Middletown Descriptive Statistics

	Likely to join Groups	Accomplished a goal	Group connections	Individual connections
Mean	2.74	1.62	2.12	2.46
Standard Error	0.12	0.05	0.11	0.20
Median	3.00	2.00	2.00	1.00
Mode	3.00	2.00	1.00	1.00
Standard Deviation	1.09	0.49	0.98	1.79
Sample Variance	1.21	0.24	0.96	3.21

Range	7	1	3	5
Minimum	0	1	1	0
Maximum	7	2	4	5
Sum	214	126	165	192
Count	78	78	78	78

Table 3.29 Lumbertown Descriptive Statistics

	Likely to join Groups	Accomplished a goal	Group connections	Individual connections
Mean	2.48	1.76	1.73	2.18
Standard Error	0.15	0.09	0.16	0.31
Median	3.00	2.00	1.00	1.00
Mode	3.00	2.00	1.00	1.00
Standard Deviation	0.83	0.50	0.94	1.78
Sample Variance	0.69	0.25	0.89	3.15
Range	3	2	3	4
Minimum	1	0	1	1
Maximum	4	2	4	5
Sum	82	58	57	72

Count	33	33	33	33
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The mean for Watertown survey item 14 (likeliness of joining groups) indicates respondents join groups due to Facebook/social network sites. The mean for survey item 15 (goal accomplishment) indicates most did not accomplish a goal with the group. The mean for survey item 16 (number of groups joined) indicates respondents are connected to 6-10 organizations on social network sites. The mean for survey item 17 (number of personal connections) indicates respondents were connected to 21-30 people in the Watertown organization. This item did have a larger standard deviation (1.64) so the responses varied the most for this item.

The mean for Middletown survey item 14 (likeliness of joining groups) indicates respondents are somewhat likely to join more groups due to Facebook/social network sites. The mean for survey item 15 (goal accomplishment) indicates most did not accomplish a goal with the group. The mean for survey item 16 (number of groups joined) indicates respondents are connected to 6-10 organizations on social network sites. The mean for survey item 17 (number of personal connections) indicates respondents were connected to 21-30 people in the Middletown organization. This item did have a larger standard deviation (1.79) so the responses varied the most for this item.

The mean for Lumbertown survey item 14 (likeliness of joining groups) indicates respondents are somewhat likely to join more groups due to Facebook/social network sites. The mean for survey item 15 (goal accomplishment) indicates most did not accomplish a goal with the group. The mean for survey item 16 (number of groups joined) indicates respondents are connected to 6-10 organizations on social network sites. The mean for survey item 17 (number of

personal connections) indicates respondents were connected to 21-30 people in the Lumbertown organization. This item did have a larger standard deviation (1.78) so while the sample is the smallest (33) the responses varied the most for this item for each group.

Overall, the standard deviation for these items, respondents from each group answered similarly except for when asked how many individual connections they have made within their group (item 17).

One-Way ANOVA

A one-way ANOVA was conducted to determine if any of the three groups surveyed were significantly different from each other in terms of social capital. No statistically significant differences were found.

Table 3.30 One-Way ANOVA City (Lumbertown, Middletown, Watertown)

Source	DF	SS	MS	F	P
Factor	2	5309	2654	1.60	0.254
Error	9	14894	1655		
Total	11	20203			

Table 3.31 One-Way ANOVA Gender

Source	DF	SS	MS	F	P
Factor	2	10816	5408	10.71	0.04
Error	3	1515	505		
Total	5	12331			

Table 3.32 One-Way ANOVA Age

Source	DF	SS	MS	F	P
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Factor	2	10420	5210	3.51	0.08
Error	9	13351	1483		
Total	11	23770			

Two-Way ANOVA

A two-way ANOVA was conducted that examined the effect of age and city on social capital. In addition, a two-way ANOVA was conducted that examined the effect of gender and city on social capital. The survey questionnaire items were Likert-type and the results were grouped as positive (answer A) or negative (answer B) and the two-way ANOVA tests were conducted for each. The independent variables for the tests were city, gender, and age. The dependent variables for the tests were combined survey items eleven through fourteen that reflected the social capital variable, positive answers (answer A), and negative answers (answer B).

Table 3.33 Two-Way ANOVA Gender and City (independent variable) answer A (dependent variable)

Source	DF	SS	MS	F	P
Row-City	2	515.25	257.63	5.19	0.02
Gender	1	108.38	108.38	2.18	0.16
Interaction	2	175.75	87.88	1.77	0.19
Error	18	894.25	49.68		
Total	23	1693.63			

Table 3.34 Two-Way ANOVA Gender and City (independent variable) answer B (dependent variable)

Source	DF	SS	MS	F	P
Row-City	2	241.00	120.50	1.35	0.28
Gender	1	7.04	7.04	0.08	0.78
Interaction	2	26.33	13.17	0.15	0.86
Error	18	1601.25	88.96		
Total	23	1875.63			

Table 3.35 Two-Way ANOVA Age and City (independent variable) answer A (dependent variable)

Source	DF	SS	MS	F	P
Row-City	2	1189.50	594.75	21.11	0.00
Age	3	87.73	29.24	1.04	0.39
Interaction	6	808.83	134.81	4.78	0.00
Error	36	1014.25	28.17		
Total	47	3100.31			

Table 3.36 Two-Way ANOVA Age and City (independent variable) answer B (dependent variable)

Source	DF	SS	MS	F	P
Row-City	2	554.67	277.33	5.37	0.01
Age	3	42.23	14.08	0.27	0.85
Interaction	6	322.33	53.72	1.04	0.42
Error	36	1860.25	51.67		
Total	47	2779.48			

When conducting a two-way ANOVA to examine the effect of gender and city on social capital, significant statistical difference occurred between the cities of Middletown and Lumbertown, $p < 0.05$. This may be due to more women responding to the Middletown survey (55.1%) when compared to the number of women responding to the Lumbertown survey (45.5%). This may be important when considering that 50.9% of the people in Middletown are women and 51.5% of the people in Lumbertown city are women (see Table 3.3). There was also a significant difference between the cities of Middletown and Lumbertown when conducting a two-way ANOVA to examine the effect of age and city, $p < 0.05$ (answer A) and $p < 0.05$ (answer B) with Middletown reporting greater social capital. There was evidence of an interaction between age and city, $p < 0.05$, indicating a significant effect between age and city in

building social capital. This may reflect the five year difference in median age between these two cities (Middleton, 38.3 years; Lumbertown, 33.5 years) (see Table 3.4).

Chi-Square

A chi-square test was conducted to examine research question one and research question three and the association between social bonds (RQ1) and social capital (RQ2). The null hypothesis states that there is no association between social capital and social bonds. We would expect the null hypothesis to be void because previous research indicates that those who report strong social capital also report strong social bonds. The chi-square findings, $p < 0.05$, indicate significance related to social bonds and social capital. In other words, those who reported strong social bonds also reported strong social capital. This may reflect evidence of bridging (social networks between diverse groups) and bonding (social networks between homogenous groups) capital due to the demographic make-up of the cities studied specifically Lumbertown (demographically diverse) and Middletown (demographically homogenous).

Table 3.37 Chi-Square Social Bonds (RQ1) and Social Capital (RQ3) and Gender

	Social Capital			Social Bonds			Total
	Middle town	Watert own	Lumbe rtown	Middle town	Watert own	Lumbert own	
Female Count	33	25	14	33	26	20	151
Expected count	32.51	19.58	15.47	35.45	25.66	22.33	
Percentage	0.01	1.49	0.14	0.17	0.01	0.24	
Male Count	28	17	17	16	10	9	97

Expected count	20.88	12.58	9.94	22.77	16.48	14.34	
Percentage	2.42	1.55	5.02	2.01	2.55	1.99	
Female							
Count	15	10	4	25	25	22	101
Expected count	21.75	13.10	10.35	23.71	17.16	14.93	
Percentage	2.09	0.73	3.89	0.07	3.58	3.34	
Male							
Count	15	7	2	15	6	6	51
Expected count	10.98	6.61	5.23	11.97	8.67	7.54	
Percentage	1.47	0.02	1.99	0.77	0.82	0.32	
Female							
Count	15	15	7	33	27	24	121
Expected count	26.05	15.69	12.40	28.41	20.56	17.89	
Percentage	4.69	0.03	2.35	0.74	2.02	2.09	
Male							
Count	11	0	11	14	9	5	50
Expected count	10.77	6.49	5.12	11.74	8.50	7.39	
Percentage	0.01	6.485	6.74	0.44	0.03	0.78	
Female							
Count	28	22	10	30	20	21	131
Expected count	28.20	16.99	13.42	30.75	22.26	19.37	
Percentage	0.00	1.48	0.87	0.02	0.23	0.14	
Male							
Count	21	4	14	15	8	7	69
Expected count	14.86	8.95	7.07	16.20	11.72	10.20	
Percentage	2.54	2.74	6.73	0.09	1.83	1.01	
Total	166	100	79	181	131	114	771

Chi-Sq = 80.178, DF = 35, P-Value = 0.000

Table 3.38 Chi-Square Social Bonds (RQ1) and Social Capital (RQ3) and Age

	Social Capital			Social Bonds			Total
	Middle town	Watert own	Lumbe rtown	Middle town	Watert own	Lumbe rtown	
20-24							
Count	33	1	1	6	1	1	43
Expected count	12.68	4.09	4.09	11.44	7.61	3.10	
Percentage	32.58	2.33	2.33	2.58	5.74	1.43	
25-29							
Count	28	6	6	23	7	5	75
Expected count	22.11	7.13	7.13	19.95	13.27	5.42	
Percentage	1.57	0.18	0.18	0.47	2.96	0.03	
30-34							
Count	27	14	14	23	13	8	99
Expected count	29.19	9.41	9.41	26.33	17.51	7.15	
Percentage	1.64	2.24	2.24	0.42	1.16	0.10	
35-							
Count	1	10	10	13	15	10	59
Expected count	17.39	5.61	5.61	15.69	10.44	4.26	
Percentage	15.45	3.44	3.44	0.46	1.99	7.74	
20-24							
Count	15	1	1	5	1	1	24
Expected count	7.08	2.28	2.28	6.38	4.25	1.73	
Percentage	8.87	0.72	0.72	0.30	2.48	0.31	
25-29							
Count	15	0	0	11	8	4	38
Expected count	11.20	3.61	3.61	10.11	6.72	2.74	
Percentage	1.287	3.44	3.61	0.08	0.24	0.58	

30-34							
Count	11	4	4	21	14	0	54
Expected count	15.92	5.13	5.13	14.36	9.55	3.90	
Percentage	1.521	0.25	0.25	3.07	2.07	3.89	
35-							
Count	10	1	1	13	14	3	42
Expected count	12.38	3.99	3.99	11.17	7.43	3.03	
Percentage	0.46	2.24	2.24	0.30	5.81	0.000	
20-24							
Count	15	0	0	7	2	1	25
Expected count	7.37	2.38	2.38	6.65	4.42	1.81	
Percentage	7.89	2.38	2.38	0.12	1.33	0.36	
25-29							
Count	11	1	1	18	10	3	44
Expected count	12.97	4.18	4.18	11.70	7.78	3.18	
Percentage	0.30	2.42	2.42	3.39	0.63	0.01	
30-34							
Count	7	9	9	25	13	6	69
Expected count	20.34	6.56	6.56	18.35	12.21	4.98	
Percentage	8.75	0.91	0.91	2.41	0.52	0.21	
35-							
Count	6	8	8	10	13	3	48
Expected count	14.15	4.56	4.56	12.77	8.49	3.47	
Percentage	4.69	2.59	2.59	0.59	2.39	0.06	
20-24							
Count	28	1	1	6	2	1	39
Expected count	11.50	3.71	3.71	10.37	6.90	2.82	
Percentage	23.68	1.98	1.98	1.84	3.48	1.17	
25-29							
Count	21	5	5	11	6	4	52
Expected count	15.33	4.94	4.94	13.83	9.20	3.75	

Percentage	2.09	0.00	0.00	0.58	1.11	0.02	
30-34							
Count	17	12	12	18	13	5	77
Expected count	22.70	7.32	7.32	20.48	13.62	5.56	
Percentage	1.43	2.99	2.99	0.30	0.03	0.05	
35-							
Count	0	6	6	11	15	5	43
Expected count	12.68	4.09	4.09	11.44	7.61	3.10	
Percentage	12.68	0.89	0.89	0.02	7.19	1.16	
Total	245	79	79	221	147	6	831

Chi-Sq = 254.406, DF = 75, P-Value = 0.000

Summary Research Question 3

In general, the respondents from each young professional group reported that they are likely to join more groups because of social network sites, they have not accomplished a goal with the group, they have 21-30 individual connections due to group membership, and belong to 6-10 groups due to social network sites. Significant statistical differences occurred between Middletown and Lumbertown with Middletown reporting greater social capital.

Conclusion

This chapter reported the statistical analysis of the study's survey questionnaire. In general, the young professionals who responded to the survey questionnaire report that their personal goals coincide with the group's goals, that they trust fellow groups members, are willing to ask fellow members for help and that the group's Facebook page allows members to

connect with each other. Their reported level of social engagement varied among age groups, gender and city. They use social network sites to build individual and group connections. The discussion of the larger implications will be presented in chapter four.

Chapter 4

Discussion

The purpose of this study was to examine the perceptions of social bonds, social engagement and social capital by users of social network sites, specifically Facebook. Members of three Midwest organizations for young professionals were surveyed. The members of these organizations were asked to complete an on line questionnaire about their use of Facebook in relation to their membership in their respective young professional group. This chapter presents the conclusions for each research question, and discusses the implications of the findings. It concludes with a discussion of future research and limitations of the study.

Research Question 1

The first research question asked whether users of social network sites, specifically Facebook, report that use reinforces members' social bonds and if so what mechanisms do they report as reinforcing social bonds. In order to answer that question respondents were asked about goals, trust, willingness to ask other group members for help. They were also asked if the group's Facebook page positively or negatively affects the ability for members to connect with one another.

There was a significant statistical difference between the cities of Middletown, Lumbertown, and Watertown with Middletown respondents reporting the strongest social bonds, followed by Watertown and then Lumbertown. When considering the demographic make-up of these cities, there is a difference between these cities in regards to employment options. Middletown has two major employers while Lumbertown and Watertown have a variety of employers.

There was also a significant statistical difference between men and women, with women reporting stronger social bonds than men. These results coincide with previous research findings of women reporting stronger social bonds in their use of social network sites. Acar (2008) found that women had larger online social networks and spend more time communicating with network members. Fallows (2005) found that women value communication with friends, family and colleagues while men value communication with special interest groups. The members of young professional organizations studied here would not be considered special interest groups and due to proximity of the groups' headquarters, members may be colleagues or friends. Perhaps if a different type of group was studied, the results would have differed.

There was a significant difference between the 20-24 age group and the 25-29, 30-34 and 35 and older age groups with the older age groups claiming stronger social bonds. There was also a significant difference between the 25-29 age group and the 30-34 age group with the 30-34 age group claiming stronger social bonds. This is not completely unexpected because previous studies have indicated that there can be a divide among age groups when determining how the different age groups incorporate social network sites into their lives. These previous studies indicated that younger age groups incorporate social network sites into their lives more than older age groups. In 2012, it was reported that 83% of adults age 18-29 and 77% of adults age 30-49 used social network sites (Duggan & Brenner, 2013). This study focused on three groups of young professionals with the group limiting membership to the early 20s to mid-40s age range, and there was a difference between the youngest and oldest groups. Yet, there were differences between the other age groups too which could indicate that age may not predict the social bonds people create when using social network sites.

Watertown, Middletown and Lumbertown respondents reported that their personal goals coincided with the goals of their respective young professional organization. This is consistent with previous studies that reported that social bonds are created and fostered when an organization has clear goals and tasks for its members (see Tsai, 2000; Jarvenpaa & Leidner, 1999). This also gives some indication about how trust is developed among members using social media. When there is structure, common group activities, and information exchange through social network sites, trust is built (Jarvenpaa & Leidner, 1999; Gil de Zuniga et al., 2012). Successful organization social network sites are built on shared values (Warnick, 2001). These organizations have clearly stated goals and dedicated leadership (a paid administrator and various volunteer committees comprised of group members).

Watertown, Middletown and Lumbertown respondents all reported that their respective groups' Facebook page allowed them to maintain a connection with the group and each other. These results support previous studies that reported social network sites can be a way to build social bonds. When groups are interactive online they accomplish their goals, sustain membership and give members a sense of belonging (Rafaeli & Sudweeks, 1997). Facebook users who use the social network site several times per day are more likely to be trusting (Hampton et al., 2011). Quan-Haase et al (2002) also found a correlation between time spent online and the sense of community built with online communities. Respondents from each city spent up to two hours using social media when online and reported that the Internet allowed them to spend slightly more time participating in social, civic, professional, religious or spiritual group activities.

The results suggest then that users of social network sites, specifically Facebook, report that use does reinforces their social bonds. The mechanisms for doing so include opportunities

to communicate with group members through the public Facebook wall and through private messages to fellow group members. The members share common goals, trust fellow members, would be willing to ask a fellow member for help and use the group's Facebook page to build social bonds.

Research Question 2

The second research question asked users of social network sites if this form of communication facilitates social engagement and if so what mechanisms do they report as facilitating social engagement. In order to answer that question respondents were asked about specific posts that were visible on the public wall of the group's Facebook page and specific face-to-face events during a two-week period. They were also asked if they read, liked, commented, created a post or attended a face-to-face event. During this two-week period, Watertown had 15 posts and two face-to-face event opportunities, Middletown had 17 posts and three face-to-face event opportunities, and Lumbertown had 3 posts and one face-to-face opportunity. The posts were categorized by type – Events, Holiday, Photos, Professional and Shared. Not all groups created a post for each category. The predominant post type was for Events.

Based on previous research, it might be expected that the 20-24 age group would be most likely to be socially engaged with the group using its social network site. When members of each group were asked about specific posts and events the, 25-29, 30-24 and 35 and older age groups were the most likely to read, like, comment or create a post and attend a group event. This suggests that use may be more widely distributed across age groups than previously research has suggested.

Based on previous research, it might be expected that women would be more socially engaged with the group when compared to men. In the current study, this was the case for some, but not all types of engagement. When asked about liking or creating specific posts, women were more engaged than men. Middletown and Lumbertown women commented more than men and Watertown men commented more than women. Reading posts varied based on topic and city. Reading a post requires the least amount of engagement when compared to the other options (liking, commenting or creating a post, and attending an event). The majority of respondents from any city stated they read many of the posts while fewer liked, commented, created or attended an event. Lumbertown men and Middletown women were most likely to read a post. Watertown members varied based on post topic with women reading most about events and men reading about holidays, photos, and professional topics.

The results suggest that the young professional groups' Facebook page serves as a supplement to their offline activities. The groups began before social network sites gained popularity in everyday lives when only face-to-face activities were essentially the only option to network with area young professionals. The respective Facebook pages are an additional way for members to interact with each other and respondents appear to be using it on various levels with most reading and liking posts, some commenting on posts or attending a face-to-face event, and few creating posts. Users feel empowered when they are active participants (Trainor, 2012). Social network sites can foster norms of reciprocity, trust and opportunities for engagement (Gil de Zuniga et al., 2012; Quan-Haase et al., 2002; Duggan & Brenner, 2012). The groups offer face-to-face events and a variety of Facebook post topics that members can engage with on the level they desire.

The results suggest that users of social network sites, specifically Facebook, report social engagement at varying levels. While it was beyond the scope of this study to investigate members' desired level of social engagement, there was evidence that members engage with the group utilizing the respective group Facebook page and in face-to-face settings. They attend the groups' face-to-face events and read, like, comment and create posts for the Facebook page.

Research Question 3

The third research question asks whether members report that using social network sites contributes to their social capital and if so what mechanisms do they report as contributing to social capital? In order to answer that question respondents were asked how likely they are to join a group due to their social media presence, how many goals they have accomplished with the group, how many individual connections they have within the group and how many groups they belong to.

The median age for Watertown is 35.8 years. This population falls below the state average in education level, income level, and poverty level. The top three racial categories are white (95%), black (2%), and Hispanic (5%). The median age for Lumbertown is 33.5 years. This population falls below the state average in education level, income level, and above the average poverty level. The top three racial categories are white (76%), black (19%), and Hispanic (8%). The median age for Middletown is 38.3 years. This population falls above the state average in education level, income level, and below state the average poverty level. The top three racial categories are white (94%), black (1%), and Hispanic (2%). The survey respondents reported having a bachelor's degree – Watertown (82%), Middletown (90%), and Lumbertown (88%). The top three racial categories for Watertown members are white (94%), black (4%), and

Hispanic (2%). The top three racial categories for Lumbertown members are white (55%), black (30%), and Hispanic (12%). The top three racial categories for Middletown members are white (94%), black (0%), and Hispanic (4%).

Although not tested directly, the demographic differences between the cities of Middletown and Lumbertown may account for the statistical differences. The size of the young professional groups are similar (Middletown = 366 and Lumbertown = 376) while the city populations vary (Middletown = 84,000 and Lumbertown = 197,000). Lumbertown is a more racially diverse community; they have lower incomes and have higher poverty rates when compared to Middletown.

Demographic characteristics such as those described above have been a consideration in previous research of social capital (see Wellman, 2003; Bryne, 2008; Wellman & Hampton, 1999; and Bourdieu, 1987). Bourdieu (1987) found that social capital might encourage social inequality by fostering groups that are not demographically diverse while Wellman et al (2003) found that social network sites offer the opportunity for people belong to diverse groups because they are not necessarily geographically-based. The results of this survey indicate that the more diverse population (Lumbertown) builds less social capital than the less diverse population (Middletown) despite the use of social networking sites. It is not that the diverse respondents for Lumbertown have not created social capital. They may be building bridging social capital (building relationships with others different than you) while Middletown respondents may be building bonding social capital (building relationships with others similar to you).

One way social capital has been measured is through number of individual and group connections. In measuring social capital, the greater number of connections to organizations and

people the greater the social capital. The respondents reported belonging to an average of 6-10 organizations, stating that social network sites facilitate joining organizations. They also reported that they have connected to 21-30 members of the young professional organization surveyed. This indicates that members of Watertown, Middletown and Lumbertown are using social network sites to create social capital.

Another way social capital has been measured is by assessing efforts to work together to fulfill a common goal. Respondents from Watertown, Middletown and Lumbertown reported that they did not work together to accomplish a goal within the year. This indicates that they are building social capital using Facebook to build their personal network but that the engagement with Facebook is not accomplishing a goal. Looking at the specific posts the respondents were asked about for this study, there were only posts about social engagement and networking. Although, it should be noted that respondents were asked if they accomplished a goal in the past year, not just within the survey period. Also, a large part of the groups' missions are for young professionals to network with each other so they are accomplishing a key goal of the group.

Implications

Previous research in this area applied various theories to including displacement theory, social shaping of technology theory, and the theory of complementarity. This study was guided by the theory of complementarity, which suggests that social network sites can be integrated into people's lives, complementing rather than interfering with other aspects of their lives. In general, this framework received support. The results suggest that face-to-face activities and interests of people will translate to their social network site engagement. Respondents joined their local young professional network and were engaged with the group through its Facebook page and

face-to-face activities. Facebook engagement was another avenue for members to be involved with the group. Thus, social network sites complement other forms of engagement.

Displacement theory suggests that choosing one activity decreases the amount of time that can be devoted to other activities. For example, time spent using social network sites may keep people from other activities, including face-to-face activities. Researchers including, Nie and Erbring (2002) do not intend to paint a negative view of the Internet but argue that time spent online is a tradeoff for time spent elsewhere. Other researchers (Bugeja, 2005; Putnam 2000) are concerned that time online means time spent alone and that face-to-face interaction is needed in order to build character and civic engagement. Results from this study suggest that young professionals may believe social network sites allow them to interact with fellow young professionals and to belong to more social, civic, professional, religious or spiritual organizations.

Other research in this area use the social shaping of technology rejecting the view of technological determinism which states that technological development shapes society (see Mackey & Gillespie, 1992). People use technology as a tool to fulfill a need (Dutta-Bergman, 2006). Users can also rework the intended use of a technological tool for their own purposes (Mackey & Gillespie, 1992; boyd 2008). If people do not see social network sites as a tool to build social bonds, social capital, or foster social engagement with others then social network sites would not be used in that capacity. The social network sites that succeed by maintaining popularity with millions of people around the world do so because they are conscious how users utilize the site. Similarly, the administrators of young professional group pages on social network sites maintain opportunities for engagement with the social network site.

As the theory of complementarity suggests, rather than being compared as a “better” or “worse” form of communication, social network sites could work with face-to-face communications in what are increasingly multi-media lives (Squire, 2004). The social network sites allow us more ways to communicate with each other that mimic our pre-Internet methods. Social network sites do not have to compete for our time and attention. It could be incorporated into our lives with other face-to-face interactions such as club membership activities, bowling leagues, and neighborhood barbeques. In this study it was reported that young professionals participated in face-to-face activities and were engaged with the organization’s social network site. They reported liking, commenting, reading, and creating posts on their respective group’s Facebook page. The engagement on the social network site corresponds, or, complements the engagement offline. If the young professionals in this study believe in the goals of the group and engage in face-to-face activities with the group, the engagement should follow itself to the group’s social network site and it did in this study. They also reported that Facebook allowed them to communicate with each other thus increasing the possibility of building trust and creating stronger ties to one another or strengthening social bonds.

While the young professionals who participated in this study are evidently incorporating social network sites into their lives, there were some significant differences among the groups. The differences indicate that the demographic make-up of the groups influenced the results of the study. To address research question one, social bonds are defined as the feelings of trust, shared experiences, and similarity of goals the social network site user has with the group and its members. All groups reported some level of social bonds with Middletown reporting the strongest social bonds. It is beyond the scope of this study to determine if the respondents were seeking strong or weak social bonds within the group. Acar (2008) determined that online social

networks are larger than unmediated networks. This raises an important question. Is it possible people build or maintain the relationships or “friend” someone and never initiate or reciprocate contact again? The results of this study indicate that members of all three young professionals groups surveyed communicated with each other using the group’s Facebook group, trust other members, are willing to ask others group members for help and have personal goals that are similar to the group’s goals, and believe the group’s Facebook page offers opportunities to interact with other members. People give advice, share information, and gain trust through the relationships in a social network (Wellman & Berkowitz, 1988).

Middletown reported stronger social bonds than Lumbertown perhaps due the fact that the city of Middletown has two main employment opportunities while Lumbertown has a variety of such opportunities. When there are only two main employment opportunities employees are very invested in the success of those businesses. When the businesses value the networking of their young professionals, the young professionals join the local young professional group. This also provides Middletown young professionals more options to develop their social bonds as they potentially interact with each other inside as well as outside the group. The Lumbertown group leadership might have to work harder to create enough opportunities (offer more events or create more Facebook posts) for members to build social bonds.

Women reported stronger social bonds for each of the three groups studied. This supports previous research that reported that women were more likely than men to use social network sites to build relationships. For example, women have been found to place a greater value on communicating with friends and colleagues, writing more emails about news, worries, advice and making plans than men (Fallows, 2005). Women have also been found to have larger online

social networks and spend more time communicating with network members than men (Acar, 2008).

Those in the 20-24 age group reported the lowest level of social bonds when compared to those aged 25-29, 30-34, and 35 and older. Previous research would predict that the 20-24 age group would use social network sites to create the strongest social bonds. This may indicate that the goals of the groups and the opportunities for interaction are more suited to an older age group. Or, that as we get older and our responsibilities to our jobs and families increase, it may be easier to create or maintain social bonds using social network sites. Clearly, the relationship of age to use of social media sites and development of social bonds should be explored more fully.

Research question two addressed social network sites acting as a facilitator of social engagement asking young professionals about specific Facebook posts. Each group had their own unique posts. These posts were the opportunity for members to be socially engaged with the group. Members had the opportunity to read, like, comment or create a post. Overall, members from each group were socially engaged with the group. It was rare for members to create a group post which means the administrator typically created the posts for the group. This aligns with previous research that indicated successful groups provide opportunities for member to interact as well as leadership. Jarvenpaa and Leidner (1999) suggest that, to be part of a virtual team, someone should serve as a manager, and define clear goals and responsibilities for the participants. Members may know they can create a post for the group but they would rather rely on the group administrator to take the lead in this area.

The members of these young professional groups were most engaged in reading the posts created by the administrator. Who read the posts varied based on age, gender, and post topic. The posts (Watertown, 15; Middletown, 17; Lumbertown, 3) belonged to one of the following categories – events, holidays, photos, professional, or shared post. Men from Lumbertown and women from Middletown read the most posts from the two week period designated in the survey questionnaire. Watertown men preferred to read about holidays, see photos, and discuss professional topics while more women read about events. Men are more likely than women to check news, weather, and financial information (Fallows, 2005). Women place great value on communicating with friends, family, and colleagues (Fallows, 2005). Perhaps women read more about events because events are an opportunity to engage with friends, family, and colleagues.

There was no clear pattern regarding the age of those who read, liked, or commented a post with the majority of those who read a post from Middletown being in the 25-29 age group, Lumbertown being 30-34, and Watertown being 35 and older. The majority who liked a post from Middletown were 25-29 or 35 and older, Lumbertown were 30-34, and Watertown were 35 and older. The majority who commented on a post from Watertown were 25-29, Middletown were 25-29 and 30-34, and Lumbertown were 35 and older. The age group that is absent in each level of engagement is the youngest, 20-24. This was unexpected because those age 18-29 are the top users of social network sites with 83% utilizing these sites (Duggan & Brenner, 2013). A large percentage (77%) of those ages 30-49 also utilize social network sites (Duggan & Brenner, 2013). The results of this study could indicate that while there is a difference among ages in the percentage of users of social network sites, the difference is not as great as it was when social media was first studied. It is also possible that the content of the posts influence which age group will become engaged with the post.

Women from Watertown, Middletown, and Lumbertown were most likely to like a post. This is consistent with previous studies indicating that women use social network sites to engage with others. Where this study differs is that when asking the young professionals about commenting on posts, men were more likely to comment in Watertown. It is possible that whether users comment, like, read or post to a group page has less to do with gender and more to do with individual personality traits. For example, some might feel engaged reading posts, which is a low level of engagement, while others only feel engaged if they perform a more involved activity such as commenting or creating a post.

The research explored if using social network sites contribute to members social capital. Young professionals were asked if they accomplished a goal with the group, if social network sites allow them to be active with more social, civic, professional, religious or spiritual groups, how many groups they belong to and how many members they are connected to. Acar (2008) determined that online social networks are larger than unmediated networks. This study did not ask users about their unmediated networks. They were asked about their networks within the young professional group (number personal connections) and their networks outside the group (number of groups they belong to). The respondents from each groups reported an average of 21-30 personal connections and 6-10 organization memberships. Based on previous studies, it is reasonable to expect that building relationships and social capital involves more than merely accepting a friend request or “liking” a group page on a social network site. Farr (2004) believes that the future of social capital may lie with civic education, either in its current form or in evolving notions of civic engagement, such as virtual engagement. Rafaeli and Sudweeks (1997) found that online groups that are more interactive will more likely accomplish their goals, sustain membership, and give members a sense of belonging. Groups that are not interactive may

maintain a steady number of members but on a “rotating door” basis. Interaction is necessary to build network/community/social capital beyond accepting a friend request.

While the previous research questions have found evidence of social bonds, social engagement, and social bonds with the young professional groups from Lumbertown, Middletown, and Watertown this study did not find evidence of one aspect of social capital – goal accomplishment. This was surprising considering that respondents reported their personal goals were similar to the group’s goals in survey question one. One of the main goals of the group and members is networking, based on the respondents’ answer to survey question one. The group’s face-to-face events were networking opportunities. Therefore, respondents who reported attending an event did accomplish a group goal. It is possible that this is not a clear connection to members.

The greatest differences were in the findings of this study were between Middletown and Lumbertown. As noted, this may be due to demographic differences. Lumbertown is a larger, more diverse population when compared to Middletown yet the young professional in their respective groups is similar (Middletown 366 and Lumbertown 376). The median age of Lumbertown (33.5 years) is five years younger than Middletown (38.3 years), which based on previous research could mean they utilized social network sites more to build social bonds, foster social engagement, and build social capital than their Middletown counterparts. This study indicates that the older Middletown built more social bonds, were more engaged with the social network site, and created more social capital.

The population of Lumbertown is more racially diverse than Middletown and respondents from Lumbertown were also more racially diverse than Middletown. In the study of

social capital and social network sites it has been proposed that social network sites may facilitate social capital among diverse populations. This study indicates that this does occur but that it may be due to the fact that the group has clearly stated goals, opportunities for engagement and group leadership. It also indicates that, in some cases, it is not possible to be a diverse social network site group because the targeted population is not diverse.

The population of Middletown consists of 51% women, which is similar to Lumbertown's 52% yet Middletown women respondents represented 55% and Lumbertown women respondents 46%. This may have an impact on the instances where there were statistical differences between men and women of Lumbertown and Middletown.

The members of Watertown, Middletown and Lumbertown young professional groups use the social media network site Facebook to create and strengthen social bonds, foster social engagement, and build social capital. The groups' administrators facilitate this by offering Facebook posts and face-to-face events for members to network with each other; increased opportunities of interactions increase the chances the members engage socially, build social bonds and strengthen social capital. The demographic make-up of each group did influence the strength of the engagement, social capital and social bonds.

Future Research

Further research in this area of study could be approached in several ways. Investigation should go beyond self-reported survey questionnaires and explore actual use patterns by users of social network sites. This would allow investigators to track how people actually use the social network sites rather than rely on self-reported data. Further research could also include mobile devices in the study in order to determine any use patterns when study participants can be face-

to-face while still connected to social network sites. It would also be important to expand this research beyond Facebook to determine if these findings are specific to this one social network site or if similar other sites would result in different findings.

The findings also indicated statistical differences between the members of the more demographically diverse Lumbertown and the less demographically diverse Middletown. The role of ethnicity should be examined more fully. In addition, the results suggest that age is an important variable in the use of social media and social engagement. It would be useful to explore the role of age and ethnicity much more directly.

Finally, this study provided support for the theory of complementarity. While it does appear that at least in some contexts social media complements other forms of interaction, questions remains as to how and in what contexts. For example, does social media complement some activities more than others and is the complementary effect more pronounced with some groups than others? Subsequent studies should continue to test, refine and expand the theory of complementarity.

Limitations

As with all investigations, several limitations should be noted for this study. The survey questionnaire asked respondents to answer questions about their perceptions and engagement with their young professional group for a two-week period that occurred six months earlier. This is a limitation for research question two, specifically, due to the fact that those items asked respondents to recall if they liked, commented, created or read specific posts. It is possible that respondents would have difficulty accurately recalling which posts they were engaged with six months prior.

In addition, measuring variables such as trust, shared goals, and willingness to ask fellow members for help need to be refined. For example, survey respondents may report that they trust fellow members but we do not know the level of trust or if that applies to all members or just the members respondents have built a relationship with. Refining the variables will allow for a deeper analysis of social bonds, social engagement, and social capital.

Another limitation would be the number of posts each group posted to their group page within the two-week survey period. Lumbertown had three posts while Watertown made 15 posts, and Middletown made 17 posts. If an alternate two-week period was included in the survey questionnaire, it is possible that the resulting data would differ.

Lumbertown had the fewest respondents (33) while the number of members who “like” their Facebook page was 376, a similar number to Middletown who had 78 respondents. This may be due to the fact that Watertown and Middletown administrators emailed the surveys to their members but the Lumbertown administrator did not because their group policy regarding emailing members was more restrictive.

The age 20-24 age range only had a total of 12 respondents among all three groups when compared to the other age groups. This may not be enough responses to accurately represent this age group or these groups may have the smallest number of members who belong to this age group. In general, the sample size, time and sampling frame should be expanded.

Conclusion

This study found that social network sites can be used to complement other forms of user interactions and can be a mechanism for building social bonds, social engagement, and social capital. The sites are utilized at varying degrees by members and that demographic features are

associated with use. The strength of the social bonds, social engagement, and social capital differed based on the demographic make-up of the group members with the more demographically similar groups reporting stronger bonds, engagement, and capital.

Social network site use is expanding as is the study of this communication tool. Current and future social media sites are being integrated into our social, work and academic lives, which provide ample areas for future study. Continuing the study of social network sites with other types of groups with different demographic make-ups will provide a better picture of the place it has today's society.

APPENDIX A – Watertown Area Young Professionals Network

Q1: Do users of social network sites report that use reinforces social bonds and if so what mechanisms do they report as reinforcing social bonds?

1. Generally speaking, are your personal goals similar to the goals of the Watertown Area Young Professionals Network?
 - Very similar
 - Similar
 - Somewhat similar
 - Not similar
 - Don't know

2. Generally speaking, do you believe Watertown Area Young Professionals Network's Facebook page offers opportunities for interaction that allow you to feel connected to the group?
 - The group offers A LOT of opportunities for interaction
 - The group offers A MODERATE amount of opportunities for interaction
 - The group offers OCCASSIONAL opportunities for interaction
 - The group RARELY offers opportunities for interaction
 - The group NEVER offers opportunities for interaction

3. Generally speaking, how trustworthy are the members of the Watertown Area Young Professionals Network?
 - Very trustworthy
 - Moderately trustworthy
 - Neutral
 - Somewhat trustworthy
 - Not at all trustworthy

4. Generally speaking, how likely would you be to ask a fellow member of the Watertown Area Young Professionals Network Facebook page for help?
 - Very likely
 - Moderately likely
 - Neutral
 - Somewhat likely
 - Not at all likely

5. Generally speaking, would you say the Facebook page for the Watertown Area Young Professionals Network has made it easier to connect with others in the group?
- A lot easier
 - Moderately easier
 - Neutral
 - Rarely easier
 - Not at all easier

Q2: Do users of social network sites report that this form of communication facilitates social engagement and if so what mechanisms do they report as facilitating social engagement?

6. Between July 1 and July 19, which events did you attend as part of the Watertown Area Young Professionals Network? (select all that apply)
- Regional Young Professionals 80s Boat Cruise
 - Ribbon cutting for Area Chamber of Commerce
 - None
7. Between July 1 and July 19 did you like any of the following posts from the Watertown Area Young Professionals Network? (select all that apply)
- Regional Young Professionals 80s Boat Cruise event on July 2
 - First Interview & Job Fair Business Attire article on July 3
 - Happy 4th of July post on July 4
 - 6 Things You Can Do To Be Stealthier on the Internet on July 7
 - Regional Young Professionals 80s Boat Cruise event on July 8
 - Regional Young Professionals 80s Boat Cruise event on July 9
 - Ribbon Cutting for Area Chamber of Commerce on July 9
 - 8 Work Attire Commandments on July 10
 - Regional Young Professionals 80s Boat Cruise event on July 11
 - Regional Young Professionals 80s Boat Cruise event on July 12
 - Regional Young Professionals 80s Boat Cruise event on July 16
 - Regional Young Professionals 80s Boat Cruise event on July 17
 - Photos of Regional Young Professionals 80s Boat Cruise on July 19
 - Fun Fore All post on July 19
 - Fun Fore all event on July 19
 - None
8. Between July 1 and July 19 did you comment on any of the following posts from the Watertown Area Young Professionals Network? (select all that apply)
- Regional Young Professionals 80s Boat Cruise event on July 2

- First Interview & Job Fair Business Attire article on July 3
- Happy 4th of July post on July 4
- 6 Things You Can Do To Be Stealthier on the Internet on July 7
- Regional Young Professionals 80s Boat Cruise event on July 8
- Regional Young Professionals 80s Boat Cruise event on July 9
- Ribbon Cutting for Area Chamber of Commerce on July 9
- 8 Work Attire Commandments on July 10
- Regional Young Professionals 80s Boat Cruise event on July 11
- Regional Young Professionals 80s Boat Cruise event on July 12
- Regional Young Professionals 80s Boat Cruise event on July 16
- Regional Young Professionals 80s Boat Cruise event on July 17
- Photos of Regional Young Professionals 80s Boat Cruise on July 19
- Fun Fore All post on July 19
- Fun Fore all event on July 19
- None

9. Between July 1 and July 19 did you read any of the following posts from the Watertown Area Young Professionals Network?

- Regional Young Professionals 80s Boat Cruise event on July 2
- First Interview & Job Fair Business Attire article on July 3
- Happy 4th of July post on July 4
- 6 Things You Can Do To Be Stealthier on the Internet on July 7
- Regional Young Professionals 80s Boat Cruise event on July 8
- Regional Young Professionals 80s Boat Cruise event on July 9
- Ribbon Cutting for Area Chamber of Commerce on July 9
- 8 Work Attire Commandments on July 10
- Regional Young Professionals 80s Boat Cruise event on July 11
- Regional Young Professionals 80s Boat Cruise event on July 12
- Regional Young Professionals 80s Boat Cruise event on July 16
- Regional Young Professionals 80s Boat Cruise event on July 17
- Photos of Regional Young Professionals 80s Boat Cruise on July 19
- Fun Fore All post on July 19
- Fun Fore all event on July 19
- None

10. Between July 1 and July 19 did you create any of the following posts from the Watertown Area Young Professionals Network? (select all that apply)

- Regional Young Professionals 80s Boat Cruise event on July 2
- First Interview & Job Fair Business Attire article on July 3
- Happy 4th of July post on July 4
- 6 Things You Can Do To Be Stealthier on the Internet on July 7
- Regional Young Professionals 80s Boat Cruise event on July 8
- Regional Young Professionals 80s Boat Cruise event on July 9
- Ribbon Cutting for Area Chamber of Commerce on July 9

- 8 Work Attire Commandments on July 10
- Regional Young Professionals 80s Boat Cruise event on July 11
- Regional Young Professionals 80s Boat Cruise event on July 12
- Regional Young Professionals 80s Boat Cruise event on July 16
- Regional Young Professionals 80s Boat Cruise event on July 17
- Photos of Regional Young Professionals 80s Boat Cruise on July 19
- Fun Fore All post on July 19
- Fun Fore all event on July 19
- None

11. Thinking about all the different ways you communicate with the Watertown Area Young Professionals Network members, about how often do you communicate through social networking sites like Facebook?

- Every time you communicate with group members
- Usually, about 90% of the time you communicate with group members
- Frequently, about 70% of the time you communicate with group members
- Sometimes, about 50% of the time you communicate with group members
- Occasionally, about 30% of the time you communicate with group members
- Rarely, less than 10% of the time you communicate with group members
- Never

12. Overall, would you say that you spend –

- A LOT MORE time participating in social, civic, professional, religious or spiritual group activities because of the internet
- MORE time participating in social, civic, professional, religious or spiritual group activities because of the internet
- SLIGHTLY MORE time participating in social, civic, professional, religious or spiritual group activities because of the internet
- The internet has no impact on the amount of time you spend participating in these types of groups
- SLIGHTLY LESS time participating in social, civic, professional, religious or spiritual group activities because of the internet
- LESS time participating in social, civic, professional, religious or spiritual group activities because of the internet
- A LOT LESS time participating in social, civic, professional, religious or spiritual group activities because of the internet

13. How much time do you spend using social media when online?

- Up to ½ hour, per day, when active online
- Up to 1 hour, per day, when active online
- Up to 2 hours, per day, when active online
- Up to 3 hours, per day, when active online
- Up to 4 hours, per day, when active online
- Up to 5 hours, per day, when active online
- None

Q3: Do members report that using social network sites contribute to their social capital

and if so what mechanisms do they report as contributing to social capital?

14. Overall, are you more or less likely to be active in a greater number of groups (social, civic, professional, religious or spiritual) because of social network sites?

- A LOT MORE likely to be active in a greater number of groups because of social network sites
- MORE likely to be active in a greater number of groups because of social network sites
- SLIGHTLY MORE likely to be active in a greater number of groups because of social network sites
- Social network sites have no impact on the number of groups you are involved with
- SLIGHTLY LESS likely to be active in a greater number of groups because of social network sites
- LESS likely to be active in a greater number of groups because of social network sites
- A LOT LESS likely to be active in a greater number of groups because of social network sites

15. In the past 12 months, have you, along with members of the Watertown Area Young Professionals Network worked together to accomplish a goal?

- Yes
- No

16. How many groups (social, civic, professional, religious or spiritual) are you connected to on social network sites?

- 0-5
- 6-10
- 11-15
- 15-above

17. How many individual connections do you have as a result of membership in the Watertown Area Professional Network Facebook page?
- 10-20
 - 21-30
 - 31-40
 - 41-above
 - None

Demographic Questions

18. What is your age?
19. What is the highest level of education you have achieved?
- High school diploma or equivalent
 - Trade school certification
 - Associate degree
 - Bachelor's degree
 - Master's degree
 - Doctorate degree
20. What is your employment level?
- Part-time
 - Full-time
21. What is your gender?
- Female
 - Male
22. Please specify your ethnicity/race.
- White
 - Hispanic or Latino
 - Black or African American
 - Native American or American Indian
 - Asian / Pacific Islander
 - Other

APPENDIX B – Middletown Young Professionals Network

Q1: Do users of social network sites report that use reinforces social bonds and if so what mechanisms do they report as reinforcing social bonds?

23. Generally speaking, are your personal goals similar to the goals of the Middletown Young Professionals Network?
- Very similar
 - Similar
 - Somewhat similar
 - Not similar
 - Don't know
24. Generally speaking, do you believe Middletown Young Professionals Network's Facebook page offers opportunities for interaction that allow you to feel connected to the group?
- The group offers A LOT of opportunities for interaction
 - The group offers A MODERATE amount of opportunities for interaction
 - The group offers OCCASSIONAL opportunities for interaction
 - The group RARELY offers opportunities for interaction
 - The group NEVER offers opportunities for interaction
25. Generally speaking, how trustworthy are the members of the Middletown Young Professionals Network?
- Very trustworthy
 - Moderately trustworthy
 - Neutral
 - Somewhat trustworthy
 - Not at all trustworthy
26. Generally speaking, how likely would you be to ask a fellow member of the Middletown Young Professionals Network Facebook page for help?
- Very likely
 - Moderately likely

- Neutral
- Somewhat likely
- Not at all likely

27. Generally speaking, would you say the Facebook page for the Middletown Young Professionals Network has made it easier to connect with others in the group?

- A lot easier
- Moderately easier
- Neutral
- Rarely easier
- Not at all easier

Q2: Do users of social network sites report that this form of communication facilitates social engagement and if so what mechanisms do they report as facilitating social engagement?

28. Between July 1 and July 19, which events did you attend as part of the Middletown Young Professionals Network? (select all that apply)

- Regional Young Professionals 80s Boat Cruise
- July Chamber event
- Fury at the Currie
- None

29. Between July 1 and July 19 did you like any of the following posts from the Middletown Young Professionals Network? (select all that apply)

- July Chamber Connection link on July 1
- Fury at the Currie link to Chamber website on July 8
- Issues and Answers: Michigan's Energy Future link on July 9
- MACC Weekly Update on July 10
- Fury at the Currie photo on July 8
- Fury at the Currie registration post on July 8
- Fury at the Currie post on July 9
- Fury at the Currie t-shirt post on July 15
- Fury at the Currie t-shirt post with photo on July 15
- Business & Education Forum link on July 15
- Early Bird link for July Small Business Breakfast on July 15
- The 100 Young Professionals article link on July 16
- Fury at the Currie final registration/room for one more team on July 16
- MACC Weekly Update link on July 17
- Crain's Michigan Business link on July 18

- Shared post of WhichCraft Taproom photo on July 18
- Fury at the Currie weather update post on July 19
- None

30. Between July 1 and July 19 did you comment on any of the following posts from the Middletown Young Professionals Network? (select all that apply)

- July Chamber Connection link on July 1
- Fury at the Currie link to Chamber website on July 8
- Issues and Answers: Michigan's Energy Future link on July 9
- MACC Weekly Update on July 10
- Fury at the Currie photo on July 8
- Fury at the Currie registration post on July 8
- Fury at the Currie post on July 9
- Fury at the Currie t-shirt post on July 15
- Fury at the Currie t-shirt post with photo on July 15
- Business & Education Forum link on July 15
- Early Bird link for July Small Business Breakfast on July 15
- The 100 Young Professionals article link on July 16
- Fury at the Currie final registration/room for one more team on July 16
- MACC Weekly Update link on July 17
- Crain's Michigan Business link on July 18
- Shared post of WhichCraft Taproom photo on July 18
- Fury at the Currie weather update post on July 19
- None

31. Between July 1 and July 19 did you read any of the following posts from the Middletown Young Professionals Network? (select all that apply)

- July Chamber Connection link on July 1
- Fury at the Currie link to Chamber website on July 8
- Issues and Answers: Michigan's Energy Future link on July 9
- MACC Weekly Update on July 10
- Fury at the Currie photo on July 8
- Fury at the Currie registration post on July 8
- Fury at the Currie post on July 9
- Fury at the Currie t-shirt post on July 15
- Fury at the Currie t-shirt post with photo on July 15
- Business & Education Forum link on July 15
- Early Bird link for July Small Business Breakfast on July 15
- The 100 Young Professionals article link on July 16
- Fury at the Currie final registration/room for one more team on July 16
- MACC Weekly Update link on July 17
- Crain's Michigan Business link on July 18

- Shared post of WhichCraft Taproom photo on July 18
- Fury at the Currie weather update post on July 19
- None

32. Between July 1 and July 19 did you create any of the following posts from the Middletown Young Professionals Network? (select all that apply)

- July Chamber Connection link on July 1
- Fury at the Currie link to Chamber website on July 8
- Issues and Answers: Michigan's Energy Future link on July 9
- MACC Weekly Update on July 10
- Fury at the Currie photo on July 8
- Fury at the Currie registration post on July 8
- Fury at the Currie post on July 9
- Fury at the Currie t-shirt post on July 15
- Fury at the Currie t-shirt post with photo on July 15
- Business & Education Forum link on July 15
- Early Bird link for July Small Business Breakfast on July 15
- The 100 Young Professionals article link on July 16
- Fury at the Currie final registration/room for one more team on July 16
- MACC Weekly Update link on July 17
- Crain's Michigan Business link on July 18
- Shared post of WhichCraft Taproom photo on July 18
- Fury at the Currie weather update post on July 19
- None

33. Thinking about all the different ways you communicate with Middletown Young Professionals Network members, about how often do you communicate through social networking sites like Facebook?

- Every time you communicate with group members
- Usually, about 90% of the time you communicate with group members
- Frequently, about 70% of the time you communicate with group members
- Sometimes, about 50% of the time you communicate with group members
- Occasionally, about 30% of the time you communicate with group members
- Rarely, less than 10% of the time you communicate with group members
- Never

34. Overall, would you say that you spend –

- A LOT MORE time participating in social, civic, professional, religious or spiritual group activities because of the internet
- MORE time participating in social, civic, professional, religious or spiritual group activities because of the internet
- SLIGHTLY MORE time participating in social, civic, professional, religious or spiritual group activities because of the internet
- The internet has no impact on the amount of time you spend participating in these types of groups
- SLIGHTLY LESS time participating in social, civic, professional, religious or spiritual group activities because of the internet
- LESS time participating in social, civic, professional, religious or spiritual group activities because of the internet
- A LOT LESS time participating in social, civic, professional, religious or spiritual group activities because of the internet

35. How much time do you spend using social media when online?

- Up to ½ hour, per day, when active online
- Up to 1 hour, per day, when active online
- Up to 2 hours, per day, when active online
- Up to 3 hours, per day, when active online
- Up to 4 hours, per day, when active online
- Up to 5 hours, per day, when active online
- None

Q3: Do members report that using social network sites contribute to their social capital

and if so what mechanisms do they report as contributing to social capital?

36. Overall, are you more or less likely to be active in a greater number of groups (social, civic, professional, religious or spiritual) because of social network sites?

- A LOT MORE likely to be active in a greater number of groups because of social network sites
- MORE likely to be active in a greater number of groups because of social network sites
- SLIGHTLY MORE likely to be active in a greater number of groups because of social network sites
- Social network sites have no impact on the number of groups you are involved with
- SLIGHTLY LESS likely to be active in a greater number of groups because of social network sites
- LESS likely to be active in a greater number of groups because of social network sites
- A LOT LESS likely to be active in a greater number of groups because of social network sites

37. In the past 12 months, have you, along with members of the Middletown Young Professionals Network worked together to accomplish a goal?

- Yes
- No

38. How many groups (social, civic, professional, religious or spiritual) are you connected to on social network sites?

- 0-5
- 6-10
- 11-15
- 15-above

39. How many individual connections do you have as a result of membership in the Middletown Young Professional Network Facebook page?

- 10-20
- 21-30
- 31-40
- 41-above
- None

Demographic Questions

40. What is your age?

41. What is the highest level of education you have achieved?

- High school diploma or equivalent
- Trade school certification
- Associate degree
- Bachelor's degree
- Master's degree
- Doctorate degree

42. What is your employment level?

- Part-time

- Full-time

43. What is your gender?

- Female
- Male

44. Please specify your ethnicity/race.

- White
- Hispanic or Latino
- Black or African American
- Native American or American Indian
- Asian / Pacific Islander
- Other

APPENDIX C – Lumbertown Young Professionals Network (YPN)

Q1: Do users of social network sites report that use reinforces social bonds and if so what mechanisms do they report as reinforcing social bonds?

45. Generally speaking, are your personal goals similar to the goals of the Lumbertown Young Professionals Network?
- Very similar
 - Similar
 - Somewhat similar
 - Not similar
 - Don't know
46. Generally speaking, do you believe Lumbertown Young Professionals Network's Facebook page offers opportunities for interaction that allow you to feel connected to the group?
- The group offers A LOT of opportunities for interaction
 - The group offers A MODERATE amount of opportunities for interaction
 - The group offers OCCASSIONAL opportunities for interaction
 - The group RARELY offers opportunities for interaction
 - The group NEVER offers opportunities for interaction
47. Generally speaking, how trustworthy are the members of the Lumbertown Young Professionals Network?
- Very trustworthy
 - Moderately trustworthy
 - Neutral
 - Somewhat trustworthy
 - Not at all trustworthy
48. Generally speaking, how likely would you be to ask a fellow member of the Lumbertown Young Professionals Network Facebook page for help?
- Very likely
 - Moderately likely
 - Neutral
 - Somewhat likely
 - Not at all likely

49. Generally speaking, would you say the Facebook page for the Lumbertown Young Professionals Network has made it easier to connect with others in the group?

- A lot easier
- Moderately easier
- Neutral
- Rarely easier
- Not at all easier

Q2: Do users of social network sites report that this form of communication facilitates social engagement and if so what mechanisms do they report as facilitating social engagement?

50. Between July 1 and July 19, which events did you attend as part of the Lumbertown Young Professionals Network? (select all that apply)

- Regional Young Professionals 80s Boat Cruise
- None

51. Between July 1 and July 19 did you like any of the following posts from the Lumbertown Young Professionals Network? (select all that apply)

- Regional Young Professionals 80s Boat Cruise event on July 2
- Regional Young Professionals 80s Boat Cruise event on July 15
- Post asking for photos from the Regional Young Professionals 80s Boat Cruise on July 17
- None

52. Between July 1 and July 19 did you comment on any of the following posts from the Lumbertown Young Professionals Network? (select all that apply)

- Regional Young Professionals 80s Boat Cruise event on July 2
- Regional Young Professionals 80s Boat Cruise event on July 15
- Post asking for photos from the Regional Young Professionals 80s Boat Cruise on July 17
- None

53. Between July 1 and July 19 did you read any of the following posts from the Lumbertown Young Professionals Network? (select all that apply)

- Regional Young Professionals 80s Boat Cruise event on July 2
- Regional Young Professionals 80s Boat Cruise event on July 15
- Post asking for photos from the Regional Young Professionals 80s Boat Cruise on July 17

- None

54. Between July 1 and July 19 did you create any of the following posts from the Lumbertown Young Professionals Network? (select all that apply)

- Regional Young Professionals 80s Boat Cruise event on July 2
- Regional Young Professionals 80s Boat Cruise event on July 15
- Post asking for photos from the Regional Young Professionals 80s Boat Cruise on July 17
- None

55. Thinking about all the different ways you communicate with the Lumbertown Young Professionals Network members, about how often do you communicate through social network sites like Facebook?

- Every time you communicate with group members
- Usually, about 90% of the time you communicate with group members
- Frequently, about 70% of the time you communicate with group members
- Sometimes, about 50% of the time you communicate with group members
- Occasionally, about 30% of the time you communicate with group members
- Rarely, less than 10% of the time you communicate with group members
- Never

56. Overall, would you say that you spend –

- A LOT MORE time participating in social, civic, professional, religious or spiritual group activities because of the internet
- MORE time participating in social, civic, professional, religious or spiritual group activities because of the internet
- SLIGHTLY MORE time participating in social, civic, professional, religious or spiritual group activities because of the internet
- The internet has no impact on the amount of time you spend participating in these types of groups
- SLIGHTLY LESS time participating in social, civic, professional, religious or spiritual group activities because of the internet
- LESS time participating in social, civic, professional, religious or spiritual group activities because of the internet
- A LOT LESS time participating in social, civic, professional, religious or spiritual group activities because of the internet

57. How much time do you spend using social media when online?

- Up to ½ hour, per day, when active online
- Up to 1 hour, per day, when active online
- Up to 2 hours, per day, when active online
- Up to 3 hours, per day, when active online
- Up to 4 hours, per day, when active online
- Up to 5 hours, per day, when active online
- None

Q3: Do members report that using social network sites contribute to their social capital and if so what mechanisms do they report as contributing to social capital?

58. Overall, are you more or less likely to be active in a greater number of groups (social, civic, professional, religious or spiritual) because of social network sites?

- A LOT MORE likely to be active in a greater number of groups because of social network sites
- MORE likely to be active in a greater number of groups because of social network sites
- SLIGHTLY MORE likely to be active in a greater number of groups because of social network sites
- Social network sites have no impact on the number of groups you are involved with
- SLIGHTLY LESS likely to be active in a greater number of groups because of social network sites
- LESS likely to be active in a greater number of groups because of social network sites
- A LOT LESS likely to be active in a greater number of groups because of social network sites

59. In the past 12 months, have you, along with members of the Lumbertown Young Professionals Network worked together to accomplish a goal?

- Yes
- No

60. How many groups (social, civic, professional, religious or spiritual) are you connected to on social network sites?

- 0-5
- 6-10
- 11-15
- 15-above

61. How many individual connections do you have as a result of membership in the Lumbertown Young Professional Network Facebook page?

- 10-20
- 21-30
- 31-40
- 41-above
- None

Demographic Questions

62. What is your age?

63. What is the highest level of education you have achieved?

- High school diploma or equivalent
- Trade school certification
- Associate degree
- Bachelor's degree
- Master's degree
- Doctorate degree

64. What is your employment level?

- Part-time
- Full-time

65. What is your gender?

- Female
- Male

66. Please specify your ethnicity/race.

- White
- Hispanic or Latino
- Black or African American
- Native American or American Indian
- Asian / Pacific Islander
- Other

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ABSTRACT**PERCEPTIONS OF SOCIAL BONDS, SOCIAL ENGAGEMENT AND SOCIAL CAPITAL BY SOCIAL NETWORK SITE USERS**

by

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In this study we investigated the perceptions of social bonds, social engagement and social capital by users of the social network site Facebook. A survey questionnaire was distributed to three similar young professional organizations in the Midwest United States. The participants were asked about their use of Facebook as members of the organization. The results indicated that social network sites can be used to complement other forms of user interactions, such as face-to-face, and can be a mechanism for building social bonds, social engagement, and social capital. The sites are utilized at varying degrees by members and the strength of the social bonds, social engagement, and social capital differed based on the demographic make-up of the group members with the more demographically similar groups reporting stronger bonds, engagement, and capital. Future research can expand this area of study by focusing on other social media sites and groups who utilize these sites.

AUTOBIOGRAPHICAL STATEMENT

Alisha M. Beckrow is currently an adjunct professor teaching principles of advertising, advertising research and copywriting, new media strategies and tactics, and creative process and design. She is also a freelance writer and social media strategist. She enhances her classes through work in various industries (marketing, financial and education), as a board member for the regional social media association and other community involvement.

Alisha has always been interested in social media – as a user, consumer, educator, and marketing professional. She sees its potential for all types of users and is excited to see how it will change and grow in the future.

In her free time, Alisha enjoys writing, volunteering and spending time with family and friends – both on and offline.