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On the Horizon: A Cast Study of Rural Migration in the Digital Age

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ON THE HORIZON:
A CASE STUDY OF RURAL MIGRATION IN THE DIGITAL AGE

by

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B.A., Middlebury College, 2006

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The final copy of this thesis has been examined by the signatories, and we find that both the content and the form meet acceptable presentation standards of scholarly work in the above mentioned discipline.

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On the Horizon: A Case Study of Rural Migration in the Digital Age

Thesis directed by Associate Professor Polly McLean

Abstract

Rural America is marked by distinct challenges, including a lack of economic, cultural and social opportunities. More and more, the discourse on how to address these issues has looked to expanding access to information communication technologies (ICTs). However the target for new technology—the young, educated population—is precisely the group documented as leaving America’s small towns. This case study explores the migration decisions of young adults from Fort Ann, a rural community in upstate New York, and how these choices relate to ICT access and use. The knowledge gap hypothesis and digital divide theory outline the conceptualization of access, where Bourdieu’s (1986) three forms of capital are used to understand individual relationships to ICTs and also to frame motivations for migration. Carr and Kefalas’ (2009) study and the four migration categories they identify form the backbone of understanding brain drain and guide the development of interview questions. Through interviews with 20 young adults who grew up in Fort Ann and have chosen different migration paths, the connections between ICTs and migration emerge through the nature of underlying social capital resources. This study concludes with a look at the implications that these results may have for Fort Ann and for other rural communities in the United States.

Dedication

To the young adults from Fort Ann, whose experiences form the foundation of this work and whose visions will guide the future of a unique and special place. And most of all, to my family, for their infinite support and for embodying the true meaning of “home.”

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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

At only 17 percent of the population, or approximately 50 million citizens, rural Americans represent a minority in the United States (U.S. Department of Agriculture, 2007). However, the landscape and communities that define this demographic bear tremendous significance. Rural America is home to many of the natural resources and productive farmland that sustain the rest of the nation (Brown & Swanson, 2003). Rural people and communities have historically been linked to a distinct way of life, marked by strong community networks and pastoral landscapes (MacTavish & Salamon, 2003). Marx (1964, 2000) describes the “peculiar intensity” that Americans have in their attraction to the rural landscape:

The soft veil of nostalgia that hangs over our urbanized landscape is largely a vestige of the once dominant image of an undefiled, green republic, a quiet land of forests, villages, and farms dedicated to the pursuit of happiness. (p. 6)

This sense of “the rural idyll” (Barcus, 2004) or “the good life” (Calabrese, 1991; Hoey, 2005) is an appeal for a bucolic life that has long haunted those individuals who do not reside in the countryside.

Despite the natural and symbolic richness of rural landscapes and communities, movement to small-town America has trickled without a marked boom in the past 50 years (Johnson, 2003). Poverty, out-migration of young populations, and limited access to high-quality medical and educational services continue to burden rural communities (LaRose, Gregg, Strover, Staubhaar, & Carpenter, 2007). In fact, the small size of the

population is central to present-day challenges faced by this geographically large portion of the country. The “rural penalty,” attributed to a low population density, impacts the presence and strength of economic, social and cultural resources (Malecki, 2003). In 2003, the Rural Sociological Society devoted an entire collection of research, titled *Challenges for Rural America in the Twenty-First Century*, to highlight the contemporary issues impacting rural populations, including population dynamics, the rural economy, and social and community resources (Brown & Swanson). In addition to population size, characteristics of the residential populace in rural communities impact the attainment and sustainability of resources. Rural locations with an overall population decline tend to lose more of their young, college-educated residents, or those individuals that research suggests have the resources to address the challenges facing many rural communities (Artz, 2003).

Local opportunities, whether economic, cultural, or social in their focus, are dependent on structural factors (Jensen, McLaughlin, & Slack, 2003). Expanding modes of communication has been one structural resource utilized to develop and support such opportunities. Federal policy has promoted the improvement of communication means in rural America dating back to the postal delivery and telephone service subsidies throughout the early twentieth century. The expansion of these services is framed within the positive economic and social implications of improved access. Keeping available modes of communication consistent across the population allows for equal access to economic, social and cultural resources among all citizens.

In the early twenty-first century, explanations for the lack of opportunities and resources in rural America can be associated with access to information communication

technology (ICT) infrastructure. As access to broadband Internet expands, so do the hopes that ICTs will help address the challenges of rural America. Most recently, this connection was made through direct federal support earmarked in the American Recovery and Reinvestment Act of 2009 expanding wireline and wireless broadband access to rural areas of the country.

Often missing from the research is the analysis of the relationship between the resources that ICTs are thought to bring and the values placed on them by young adults from rural communities. The target for new technology—the young, educated population—is precisely the group documented as leaving America’s small towns. Expanding access in rural communities will not likely fulfill its promise if the population residing there fails to value them. Furthermore, how rural populations use ICTs and the value placed on this use may help to determine the types of resources members of this population view as important, and if and how that relates to their migration decisions. In the end, where young adults from rural communities are placing the most emphasis for their technology use and the values leading to this use may help to unravel the perpetuation of population-related challenges to rural communities in the United States.

Statement of the Problem

Overall, research on economic development, access to educational and other cultural resources, and the migration of young populations are among the discourses seeking to understand the underlying reasons for current challenges of rural America. Taken together, these elements are tightly connected—young adults seek to live in places with economic, social and cultural opportunities and, in turn, the development of these opportunities is often dependent on the presence of young populations. The increasing

reliance on ICTs in everyday life has added to the discussion of disparities in access to ICTs, most predominantly broadband Internet. Often what is less clear is what role ICTs play in opportunity attainment and migration decision-making.

This case study seeks to address these various aspects together. What do young adults from a rural community value? How do these values and associated goals impact their migration decisions? And finally, how do these individuals view the role that ICTs play in meeting their value-related goals?

This topic is of personal interest. Having grown up in Fort Ann, New York, a rural community near the New York-Vermont border that is at the center of this study, I have witnessed first hand some of the challenges faced in small town America. My family connection to Fort Ann, currently a town of 6,190 people, dates back several generations to the purchase of farm property in 1853 (U.S. Census Bureau, 2010). Not unlike many other families with deep community roots, my generation is the first to begin to leave. I have spent my adult life away from Fort Ann, a move primarily motivated by the perceived lack of opportunities tied to different types of resources: obtaining higher educational attainment, finding job opportunities, and expanding a social network. What role, if any, do ICTs play in migration decisions is a question I have asked myself. Uncovering what relationships may exist between the migration of young adults and ICTs in one community may not be the panacea for rural America entirely. Nevertheless, examining the potential impact in one rural area may point to an opportunity to bring about positive change for the durability of small communities in the future.

Outline of the Thesis

This chapter has laid out a brief description of the contemporary discourse surrounding rural America in the aggregate. In chapter two, the literature addressing rural migration and ICT access will be explored in further detail. Aggregate level patterns will set the stage for the more individualized and community level focus of the in-depth interviews. The first portion of this analysis will review the knowledge gap hypothesis. This look at early considerations of information inequity provides the necessary framework for investigating digital divide theory, an interpretation of the knowledge gap hypothesis that focuses specifically on ICTs. Finally, the exploration of values, related to opportunity and resource attainment, is framed by definitions of capital—economic, social and cultural. These forms of capital will serve to bridge the perceived promises of improving community resources by closing the divide to the values sought by young adults.

The literature review continues by highlighting the current status of rural populations, including brain drain and the relationship of ICTs to development. Consistent throughout this range of literature—from knowledge gap to brain drain and rural development—are considerations of economic opportunities, educated populations, and positive individual and community networks as influential pieces. Chapter two concludes by outlining these areas as forms of capital and ends by posing the two research questions.

To investigate the ties between migration, capital, and access to and use of ICTs, a series of in-depth, semi-structured interviews were performed. Chapter three explains

the methodological process. Included in this explanation is detailed information on demographics of participants.

The final two chapters lay out the discussion and conclusions. Interview participants were divided into one of four groups based on their high school experience and migration decisions. Comparisons are drawn among the groups before examining each migration group individually. A final summary of the interview findings, as well as the possible implications of these findings and opportunities to build upon and improve this example, conclude the study.

This case study offers a unique glimpse at the broader issue of better understanding the challenges faced by rural America. Though limited in scope, the goal is to offer a new perspective on the relationship between migration patterns of rural, young adults and their ICT access and use. Making these and other connections is one way to work toward solutions of such rural issues, ensuring that the natural and symbolic values of the countryside do not fade beneath the horizon.

Definition of Terms

For the purpose of this investigation, ICTs encompass a broad definition to include more than the broadband Internet connection that is at the center of the digital divide discourse. Leaving the definition open during the interviews allowed for the participants to identify their most valued means of communication rather than limiting the discussion to just one technology. The type of use, which in this case ranges from text messaging to game design development, is also not differentiated.

Regarding the size of communities, the designations of rural and urban follow those from the U.S. Census Bureau. The Census Bureau classifies rural and urban based

on population density. According to the Census Bureau, “urban” is considered a census group “of less than 3 square miles in area and population density of at least 1,000 persons per square mile” (2010). The Census Bureau defines two types of urban locations:

Urbanized areas (UAs) of 50,000 or more people;

Urban Clusters (UCs) of at least 2,500 and less than 50,000 people (2010b)

In this study, the terms “urban” and “metropolitan” will be used interchangeably when discussing these areas. The Census Bureau’s rural classification, on the other hand, is given to locations outside of the urban designated areas. In turn, the terms “rural” and “non-metropolitan” will be used to describe any area that is not urban or metropolitan according to these standards.

Under Census Bureau criteria, Fort Ann is considered rural, with a population density of 58.6 people per square mile (2000).¹ It should be noted that Fort Ann is located within 12 miles from Glens Falls, New York, which is considered an urbanized area and is bordered on the east and south by Granville, an urban cluster (U.S. Census Bureau, Geography Division, 2003).

Definitions of rural reach beyond population size and density to include social, economic and cultural designations. The literature reviewed in the next chapter incorporates these less tangible definitions but weighs heavily on the physical and geographic definitions of rural. Still, these locations cannot be separated from the individual and societal values of the less densely populated, pastoral setting.

Finally, the scope of this paper will focus on the issues revolving around the use

¹ 2010 U.S. Census information for Urbanized Area and Urban Cluster will not be available until 2012.

of and access to digital communications technologies in the United States. Unless otherwise noted, references to rural and urban will be limited to American communities.

CHAPTER II

LITERATURE REVIEW: CONCEPTUAL AND THEORETICAL FRAMEWORK

Reliable access to modes of communication has developed over time into an assurance of our fundamental rights as American citizens, if not a right in and of itself. Most recently, the American Recovery and Reinvestment Act of 2009 has sought to bolster jobs and economic development in the wake of a worldwide recession. Central to achieving these goals was the development of the National Broadband Plan, an initiative lauded for its promise to “promote economic growth and unleash the potential of wireless broadband” (National Telecommunications & Information Administration [NTIA], 2010, p. ii). The introduction to the plan explains:

Ubiquitous access to infrastructure networks has continually driven American innovation, progress, prosperity and global leadership . . . Communications infrastructure plays an integral role in this American story . . . unleashing new opportunities for American innovators to create products and industries, new ways for citizens to engage their elected officials and a new foundation for job growth and international competitiveness. (Federal Communications Commission [FCC], 2010, p. 19)

Access to a reasonable communications infrastructure, it seems, secures the promise of our inalienable rights in a democratic, free market society.

As the twenty-first century charges forward, the connection between an adequate communication infrastructure and the security of our fundamental rights is becoming increasingly linked. Among the demographic groups recognized in the National

Broadband Plan as lagging in access to broadband Internet are rural populations. The National Broadband Plan cites high unemployment and lack of educational opportunities as current challenges for these Americans. In fact, poverty rates remain consistently higher (Jensen, McLaughlin, & Slack, 2003) and academic achievement levels perennially lower in rural places (Beaulieu, Israel, & Wimberley, 2003). Drabenstott (2001) notes “tapping digital technology” as among the challenges to development in rural America, considered alongside “encouraging entrepreneurs, leveraging the new agriculture, improving human capital, and sustaining rural environment” (as cited in Malecki, p. 201). Finally, lack of household access also decreases contact to public information and services, thus hindering individuals from connecting with social, cultural and economic resources (Holmberg, 2007).

Shortly after the release of the National Broadband Plan, a series of roundtable discussions sought to communicate the motivations for focusing federal dollars during a recession on the pursuit of universal broadband access. As one participant explained, federal funds are necessary “to further advance [the rural and underserved populations’] technology and leap them to a level of service they probably would not otherwise expect to achieve in the next five years” (NTIA, 2009, p. 3). In this sense, rural Americans will not acquire broadband access on their own but require outside support in order to catch up.

Access to ICTs is far from universal, even in urban areas. Nevertheless, in the United States, urban populations have consistently held higher levels of broadband Internet use and basic online penetration in the home as compared to individuals in rural communities. The National Telecommunications & Information Administration (NTIA)

shows that 65.9 percent of urban and 54.1 percent of rural households have access to broadband Internet (2010, p. 10). It is a stark improvement from two years prior, when rural broadband access in households lagged urban access by 15 percent (NTIA, 2010, p. 10). This data suggests that, although still behind, rural communities are moving closer to their urban counterparts in broadband Internet access.

The use of and value attributed to ICTs in a rural community must include a look at access and its relationship to use. Federal policy to promote communication tools in rural areas dates back to the postal delivery and telephone service subsidies throughout the twentieth century. As Calabrese (1991) explains, this “political effort” to expand rural communication services was grounded in a desire “to develop the productive capacity of rural America” (p. 106). He continues that the interest in federal policy has centered on the economic viability of small communities and has subsequently altered social relations in these places.

A look at the societal role that access to communication tools play stretches beyond federal policy attention. Since the 1960s, issues of information inequality and information poverty have had a place in scholarly research. Information and knowledge inequity through modes of communication highlights the reasons why rural areas are trailing behind and underscores why access has been considered so important. Similar to federal policy objectives, this research highlights the economic, cultural, and social disparities that impact access.

Information Disparity and the Knowledge Gap Hypothesis

Early considerations of disparities in resources due to different access to information arose out of mass communications effects research and focused on

information as messages in the context of social inequity (Bonfadelli, 2002; Yu, 2006). In 1970, Tichenor, Donahue, and Olien furthered the understanding of imbalanced information access with their introduction of the knowledge gap hypothesis. The knowledge gap paradigm suggests that:

As the infusion of mass media information into a social system increases, segments of the population with higher socio-economic status tend to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather than decrease.

(Tichenor et al., 1970, p. 159)

In addition to socio-economic difference, the authors identify portions of the population with higher educational attainment as privileged to information reception. Put simply, the more mass media circulating in a given society, the greater disparity of knowledge acquisition between high and low status groups.

For Tichenor et al., the knowledge gap hypothesis helps explain why a population within a society that has access to mass media could remain relatively uninformed, particularly regarding public affairs issues. With the recognition of socio-economic and educational differences, knowledge gap reveals that mass media does not diffuse information to all individuals equally. Therefore, disadvantaged populations are not simply ignorant or completely void of knowledge. Instead the inconsistencies of information access and comprehension are due in part to underlying resources that cause such apparent deficiencies in underprivileged populations (Bonfadelli).

Five factors contribute to knowledge gap: communication skills, existing knowledge, social contact, selective exposure, acceptance and retention of information,

and the nature of the mass media system (Tichenor et al.). The first four are directly related to educational and cultural attainment. Strength of communication skills is higher for better-educated individuals (Grabe, 2000) as is the breadth and depth of the general knowledge base (Price & Zaller, 1993). Educational attainment is also linked to strong social networks (Viswanath, Kosicki, Fredin, & Park, 2000) and to the use and acceptance of new information (Bonafelli; Rogers, 1962, 1995). Over time, more nuanced understandings of knowledge acquisition have been developed and tied to motivation (Dervin, 1980; Ettema & Kline, 1977; Viswanath, Kahn, Finnegan, Hertog, & Potter, 1993). But whether education or motivation drive knowledge separately or work jointly for information access, the literature remains consistent in pointing to the underlying differences in resources that impact individual access to mass media and further acceptance and comprehension of information (Yu).

The fifth and final contributory factor to the presence of knowledge gaps depends on the nature and functionality of information sources. For Tichenor et al., the mass media perpetuates or exacerbates existing socioeconomic inequalities. When the authors narrowed their focus to individual communities, they discovered a more limited knowledge gap in socioeconomic and culturally homogeneous communities that relied more heavily on interpersonal as opposed to mass communication skills (as cited in Gaziano & Gaziano, 1996). In this sense, community structure and social relationships within a group impact how information is received and transmitted rather than being dependent solely on educational or economic attainment.

Differences exist between knowledge gaps in traditional mass media as compared to new forms of ICTs. With penetration in American homes at levels of 94 percent and 98

percent for telephone and television access, respectively, differences in access to mass media technologies are minimal (Rogers, 2001). The disparities that exist with ICTs, specifically the Internet, require a broader look at “gaps in access, use and skills” (Bonfadelli, p. 73). Information provided by mass media tends to be more limited and uniform than that accessible from ICTs. Even if the decrease in the amount of shared knowledge is not problematic, users of ICTs must be more skilled in digital technologies (Bonfadelli), once again privileging populations with higher educational and socio-economic levels.

Knowledge gap hypothesis looks at disparities in the communication process from the level of mass media. With the rise of more direct, heterogeneous forms of information access through ICTs, an understanding of disparities in information access in the twenty-first century requires a look at digital divide theory.

The Digital Divide in Rural America

The knowledge gap hypothesis and similar research into information disparities laid the groundwork for understanding inequity in access to ICTs. One such technology, the Internet, has been lauded for its potential to allow a level social and economic playing field for users of all backgrounds (Strover, Chapman, & Waters, 2004). Its promise of breaking down barriers is also linked to cultural production (Klineberg & Benzecry, 2005).

The research surrounding the digital divide challenges the direct correlation between ICT access and democratizing visions. Disparities between differing populations, in this case rural and non-rural communities, continue to exist both domestically and abroad. Access to technology is not universal but rather it is based on

social circumstance (Gunkel, 2003). In fact, Wellman, Haase, Witte and Hampton (2001) find Internet use to be purely supplementary to existing resources and relationships rather than a utopian overhaul of societal norms. There is more to access than simply a connection.

Larry Irving, former U.S. Assistant Secretary of Commerce for Communications and Information is credited with coining the term “digital divide.” A phenomenon of the information age, it “is the gap that exists between individuals advantaged by the Internet and those relatively disadvantaged by the Internet” (Rogers, 2001, p. 96). Unlike the knowledge gap hypothesis, the digital divide paradigm focuses on the Internet and other ICTs rather than the less individualized mass media. The discourse surrounding investigations of a digital divide focus primarily on two areas: access and use.

First wave digital divide theory focuses on access and is characterized by a technological determinist framework (Rodino-Colocino, 2006). In this vein, Ekdahl and Trojer (2002) describe three dominant dialogues surrounding the development of ICTs on a global scale. The first regards the evolution of ICTs in a society as linear. This perspective allows for steps in the process to be bypassed in order to bring groups who are less technologically advanced to an even level with more advanced portions of a culture. The second sets digital technology as the solution to the world’s ills. The final discourse regarding ICT evolution is a certainty that for those who fail to join the information society, dire consequences are inevitable. Not only will non-adopters be left behind, they will be left out completely.

These three dialogues fall within what Rodino-Colocino define as first wave digital divide theory, characterized by its technological determinist framework and focus

on access alone. This first wave discourse measures disparities in access to question whether or not it impacts opportunities for and obstructions to economic and social redevelopment in rural America. Yet, inequities cannot be considered based on access alone. The second wave digital divide theory, explains Rodino-Colocino, moves away from the technological determinism perspective to consider acquisition of skills and individual literacy in using computers and the Internet. As Tichenor et al. observe, acceptance and retention of information contribute to knowledge acquisition. Access is the first step toward closing the knowledge gap and digital divide. However, access is only meaningful if ICTs are adopted and used by the population.

Disparities in access and use are more complex and inconsistent than understood by the presence of technology alone. According to Jung, Qiu and Kim (2001), the digital divide must be approached as “a problem for developing a relationship with technology” (as cited in Rodino-Colocino, p. 493). Access remains important as it permits the opportunity to engage with ICTs. However, it is not the magic bullet in addressing the social and economic problems of a population where access is missing. As Malecki observes, rural citizens often lack the skills and knowledge necessary to properly utilize digital infrastructure. He adds that small communities will eventually obtain equal levels of access to digital communication technologies as their urban counterparts; however the level of quality will typically remain one generation behind. In this sense, breaking down barriers through ICTs requires a broad understanding of the rural population.

Whether first or second wave digital divide theory, the reasons why a given population, in this case rural Americans, lacks the access and use enjoyed by another group rests on similar underlying social, economic and cultural differences identified by

knowledge gap theory. For instance, exclusion due to lack of physical access is often connected to economic reasons. In most cases, physical limits are considered the result of the nature of the competitive market for service providers. Rural communities, although along the paths of fiber optic lines, do not have access to the wider network (Malecki). Warf (2001) observes that consolidation due to deregulation, globalization, and technological advancements has allowed corporations to focus primarily on the most profitable regions, effectively leaving out areas with lower population densities. A limited number of service providers results in decreased competition that allows for higher access costs deployed by these corporations. The cost of bringing Internet service to rural areas often inhibits inexpensive access to be developed in communities of less than 200 households (Strover, 2001, as cited in Malecki). In the end, the economic incentive to invest resources in areas of rural America is outweighed by the expansive reach of urban centers.

Deregulation through the Telecommunications Act of 1996 set the parameters for access as the Internet has evolved and proliferated. Rural telecommunications access fell under Section 254 of the Act addressing Universal Service. Principle 3—Access in Rural and High Cost Areas—outlines the objective to ensure access:

Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services in urban areas and that are available at rates that are

reasonably comparable to rates charged for similar services in urban areas. (FCC, 1996)

The language of “reasonably comparable” opens the door for keeping rural Americans up to speed, literally in the case of broadband, with their urban counterparts. However, the vague language of the Act and lack of any enforcement structures has not diverted the digital divide.

Furthermore, Section 509 of the Act explains that Americans benefit from Internet access despite “a minimum of government regulations” (FCC). As representative of the neoliberal shift in media policy at the time, the Act sought to increase competition through deregulation. This focus on deregulation was quickly criticized as a contributing factor to the lack of broadband proliferation in rural America. Sell, Leistriz and Allen (1998) note the skepticism at the time among rural telecommunications customers that deregulation would increase competition locally. Their hesitancy was warranted; rural communities are less likely to have more than one Internet Service Provider to choose from, with availability of connection guiding service provider choice over the cost comparison decision made by residents of urban and suburban areas (Bell, Reddy, & Rainie, 2004). Altogether, the vague language, lack of enforcement, and deregulation of the 1996 Act left rural populations without competitive options and, in some cases, no options at all.

Beyond market forces, overcoming the economic barriers to access, such as cost to connect and to purchase and maintain equipment, mirror the socio-economic factors contributing to knowledge gap. The divide is not only the result of lack of economic resources but it also inhibits further economic development. Noted Wilson, Wallin and

Reiser (2003), acquisition of information through the use of ICTs is a critical element to involvement in the rising knowledge-based economy and subsequent economic success of citizens. And access to ICTs is a central factor for companies deciding location, investments, and employment (Lentz & Oden, 2001). Without basic digital ICTs, entrepreneurs and innovation leaders are unlikely to migrate to rural areas. These findings point to a connection between population characteristics and ICT access: individuals who are familiar with ICTs and can help to drive its adoption are not drawn to live in areas where the technology is most needed.

Low use of ICTs is also tied to income and education, which are generally lower in rural communities. Malecki points to the “rural penalty,” or lack of access to the worldwide economy due to “low density of population and therefore low density of most markets, and greater distance to those markets as well as information, labor, and most other resources.” This penalty puts rural communities at a disadvantage in a market requiring speed and flexibility, making it difficult to keep up even if ICTs are available (Hindman, 2000).

Among the other resources that are more difficult for rural populations to access is education. Rogers (2001) predicts the “learning-divide” will exist even when access is equal because the “skills and complexities that are required by individuals to adopt the telephone and television are much less than are required to adopt the Internet” (p. 103). Whereas 29 percent of urban Americans have received a college degree or higher, rural communities average 18 percent of their population who have achieved an equal level of education (Horrigan & Murray, 2005). This discrepancy may be due to differences in access to institutions of higher learning and to cities having higher “returns to skill and

education” (Artz, 2003). Furthermore, individuals who are less affluent, have a lower educational attainment, and are older are less likely to adopt new technologies (Rogers, 1962; 1995). With populations that typically match these demographic traits, rural areas appear to be predisposed to lack population characteristics that are prime for ICT access and use.

Taken together, these contributing factors demonstrate the interconnected nature of individual and community resources to patterns of ICT access and use. As Unwin (2009) explains:

Poverty is prescribed primarily in economic terms, and it is to be eliminated through good governance and economic growth. However, such agendas ignore the plethora of alternative arguments that see development as something much more subtle, culturally shaped and socially relevant . . . ICTs are equally significant in these alternative development agendas. (p. 15)

Therefore, the relationship between barriers to development and ICTs stretches beyond economic to include social and cultural resources.

More than a decade after the 1996 Telecommunications Act, a global recession forced the United States government to focus directly on internal development, including investment in rural broadband infrastructure to address economic, social, and cultural challenges. Similar to the Rural Electrification Administration that emerged from the Great Depression, the American Recovery and Reinvestment Act of 2009 has been applying direct federal support to fill in the gaps that the 1996 Telecommunications Act left behind.

As a counter to the federal government's laissez-faire attitude of deregulation, the Recovery Act seeks to resolve the rural penalty by expanding ICT access. The discourse surrounding the extension of broadband Internet access is mostly centered on economic gains by "increasing our productivity, global competitiveness, and improving American's quality of life" (NTIA, 2010, p. 3). The National Broadband Plan as part of the Recovery Act is lauded for its objective to "promote economic growth and unleash the potential of wireless broadband" (NTIA, 2010, p. ii). The Recovery Act has committed \$7.2 billion to support funding under the Broadband Initiatives Program (Recovery.gov, 2010). With 300 projects funded, the impact of this new federal policy is still unclear. However, the surrounding discourse reverberates a sense of hope, in not only closing the digital divide but also in providing opportunities for development to rural communities.

The knowledge gap hypothesis and digital divide theory illuminate similar population and community resources that impact access to and use of ICTs. Younger, educated and more affluent individuals are more likely to access and use new technologies but are less likely to live in rural areas. As the analysis of these theories suggests, population characteristics matter in gaining access to and use of ICTs. Rural communities could continue to be separated further from new technologies and the associated benefits unless the right individuals begin to find their home in the small towns of America. Therefore, it is vital to consider the migration decisions of young, educated populations, the group that is most likely to close the digital divide. Before addressing migration directly, a look at the value of economic, social and cultural resources will help to frame what may be motivating this demographic movement.

The Relationship Between ICTs and Capital in Everyday Life

The literature and application of the knowledge gap hypothesis and digital divide theory place an emphasis on economic, social and cultural resources. ICTs have the potential to bridge resource inequities but, just as second wave digital divide theory recognizes that providing access does not guarantee use and adoption, the types of use may not follow the linear pattern of the first wave's technological determinism. As Stern and Wellman (2010) explain:

Evaluating the role of the Internet in rural life means that we must evaluate the social, technological, and methodological aspects of its use. We must also understand that the Internet has become integrated into the daily lives of a majority of people, even in rural North America. Therefore, it is not simply a question of the suburban and urban haves and the rural have-nots but a question of differences in the use and diffusion of broadband technologies. (p. 1254)

The various forms of capital help frame why differences may exist in the role ICTs play in the everyday life of different populations. Although intended to reveal the existence of social stratification, Bourdieu's (1986) three forms of capital—economic, social and cultural—are consistent with the resources identified in the knowledge gap hypothesis and digital divide theory and are considered contributing factors to the rural penalty. It is through the presence and strength of these forms of capital that “community development” supports both “development of community and development in community” (Luloff & Bridger, 2003, p. 212).

Economic capital, according to Bourdieu, is defined by “mercantile exchange” (p. 46). Accumulated over time, it centers on the production of material wealth. As laid out

in the introductory chapter, considerations of the present-day challenges for rural America often center on poverty and the lack of economic resources due to a low population density. Poverty rates in rural areas (13.6 percent) exceed urban (11 percent), with levels of the working poor in nonmetropolitan areas consistently surpassing those of their metropolitan counterparts (Jensen, McLaughlin, & Slack). Economic capital is connected to structural explanations of poverty, including the quality of jobs available, the education to support job needs, and the support of the community (Jensen, McLaughlin & Slack). At a time when a lack of adequate ICTs deters high-tech industries from moving to non-metropolitan areas (Lentz & Oden), traditional rural industries, such as agriculture and other low-tech professions, are in decline as well (McGranahan, 2003). Occupational goals related to the attainment of economic capital are important to rural youth in migration decision-making, whereas “residential plans are linked with perceived local job opportunities” (Snyder, McLaughlin, Jensen, & Demi, 2006, p. 3). Yet viewing economic capital as the sole driving force in the world, warns Bourdieu, is too reductionist.

For Bourdieu, the web of people that surround an individual is also accumulated over time and contributes to personal resources. He explains:

Social capital is the aggregate of the actual or potential resources that are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition. (p. 51)

Social capital can be further divided into bonding and bridging, the former representing connections within a group and the latter those between different groups (Gittel & Vidal, 1998). In addition, it can also be defined on both the individual and community levels

(Flora & Flora, 2003). Social capital cannot be produced by an individual alone but is dependent on interaction with others (Stern & Adams, 2010). In the context of individuals growing up in rural America, “communities influence youth aspirations and achievement through the job opportunities provided”—economic capital—and “the attachment youth have to their families,” a social connection (Snyder, et al., p. 12)

ICTs are playing an increasing role in mobilizing social capital (Haythornthwaite & Kendall, 2010). Online communities can facilitate both bonding and bridging social capital (Stern & Adams). Regarding mobile phones and similar devices, Campbell and Kwak (2010) demonstrate that use of ICTs actually strengthens social capital by facilitating face-to-face interactions. Nevertheless, Boase (2010) suggests that social capital influences Internet adoption in rural areas in other ways. Access is not enough as “direct network externality”—where value of adoption is dependent on the number of people an individual can be connected to—has negative results due to low population density “because the network ties with whom individuals would like to communicate with online may not have Internet access” (p. 1264).

Cultural capital, the third form of capital Bourdieu addresses, is the “socially most determinant educational investment” (p. 48). Cultural capital moves beyond Becker’s (1964) definition of human capital as a means of production based on education or training to include both formal education and that inherited from and invested by an individual’s family. In looking at young adults from rural America, cultural capital points to the access to and level of educational attainment. For Bourdieu, cultural or human capital is influenced by and influential to social and economic capital. Such is the case for

rural populations where cost of education and influence of family, school personnel, and peers impact educational goals of rural youth nearing adulthood (Snyder et al.).

These forms of capital impact the resources available on the community and individual levels. Taken together with ICT access and use, the presence and strength of resources needed to address the challenges of rural America are dependent on the residing populations and “migration,” as Johnson explains, “now drives demographic change in rural America” (p. 26). Economic, social and cultural resources influence both aspirations and actions for rural youth deciding where to live after high school (Snyder et al.). Furthermore, resources at the family (Johnson, Elder & Stern, 2005) and community (Snyder et al.) levels play a central role in residential choices for young members of the rural population. Where young adults from rural communities are choosing to live and the reasons for selecting those locations requires a look at migration decisions and the influences behind them.

Migration Patterns of Rural Young Adults

In 2003, the U.S. Census Bureau released a report evaluating the migration patterns of young populations in the country between 1995 and 2000. The study found that 60 percent of Americans ages 25 to 39 moved during this time, with college-educated populations more likely to relocate and move farther away from home. Even more striking, were the findings by the Census Bureau that the more mobile educated population was primarily relocating to urban centers (Franklin, 2003).

These marked shifts in population, particularly among the young and college-educated, indicate an inequity of Bourdieu’s cultural capital, a phenomena known as “brain drain.” The term brain drain was first used in a 1963 report from the Royal Society

of London to describe the loss of natural scientists from the United Kingdom to the United States in the post-World War II era (Balmer, Godwin, & Gregory, 2009). The phenomenon has since been considered in a global context to describe the movement of populations high in cultural capital. Considered in the context of the United States, brain drain is what Artz (2005) defines as “the out-migration of young, college-educated workers from the nation’s rural areas” (p. 103). Drain, in this sense, refers directly to cultural or human capital formation and accumulation primarily through a college education.

In a global context, the dispersal of educated populations has been considered both detrimental and beneficial to sending locations. The dominant discourse looks at any migration that depletes levels of educated, human capital from a population. Beine, Docquier, and Rapaport (2001) examine the impact of brain drain within small, developing economies. The “drain effect” follows the negative impact of out-migration in which a majority if not all of the educated members of a population emigrate without returning (p. 277). Beine et al. also identify the positive “brain effect” where educated populations return to their home communities and bring with them cultural capital they have acquired. In the end, impact on the community relies on which effect is most prevalent, but it is the drain effect that has drawn the most attention in rural-to-urban migration in the United States.

An evaluation of internal migration must also include an understanding of why populations are motivated to leave small communities. Economic opportunity within locations of higher population density is one factor that has been identified as drawing young, educated populations away from rural America. Rural youth face the challenge of

giving up connections to home “as they face the realities that their educational and occupational ambitions require moving on” (Johnson et al., p. 103). Furthermore, emigration tends to occur in areas with an overall low socio-economic level and subsequent limits in growth potential. Artz found that college-educated individuals are more drawn to urban areas because they offer higher returns and greater career advantages due to their education. Pertinent to this case study, Polimerini and Iorgulescu (2008) found the “retention of college graduates” in New York State’s Capital District “is vital for regional economic development” (p. 63). The authors surveyed students who received their college education in the region and found that nearly 76 percent left following graduation due to employment opportunities elsewhere. Finally, Domina (2006) finds that the clustering of the young and educated occurs “where economic opportunities are plentiful,” stimulating further economic productivity as a collective population (p. 4).

Factors other than economic growth and education serve as mobilizing forces. Speare (1974) identifies mobility in terms of residential satisfaction, which includes the strength and type of social bonds. In their ethnographic study of a rural town in Iowa, Carr and Kefalas (2009) more specifically identify the social determinants influencing the migration decisions of young adults from a non-metropolitan community. The authors find that the “hemorrhaging of people, specifically the younger generation,” a “hallowing out many of the nation’s small towns and rural communities,” is impacted by individual social capital (p. 1). They argue that brain drain is not a predestined outcome of progress but rather migration decision-making is a gradual process impacted by the resources and

messages received from an individual's social network, resulting in four distinct migration paths taken by young adults: Achievers, Stayers, Seekers, and Returners.

The first, Achievers, are students who excel and have the resources to focus on extracurricular activities rather than after-school jobs. They are a socially affluent and well-educated minority who are encouraged by their teachers and families to use their talents to explore beyond their small town, resulting in their exodus upon graduation. The Achievers take their strong capital attainment with them when they depart, contributing to brain drain. Although the Achievers fondly remember their time at home, they have no intention of returning.

A fair look at forces impacting migration decisions of young adults from rural areas must also include an understanding of who populates rural communities. Carr and Kefalas' study explains the social and economic motivations for young populations choosing to remain in or return to a small town. In the Iowa community they study, the authors define a second category, Stayers, as young adults that do not leave their small hometown following high school graduation. These individuals must help support their families and lack the social capital of the Achievers in the community. They drop out or graduate high school and quickly find a job in or near their hometown.

Somewhere in between Achievers and Stayers lie Seekers and Returners (Carr & Kefalas). These two groups are missing a piece of the personal drive, community support or economic resources of the Achievers and are therefore limited in their distance or time spent away from their rural hometown. Seekers often join the military or attend a community college in an attempt to make up for their lack in resources. Sometimes they

stay, sometimes they return, but Seekers are restless and eager to see what lies beyond the small town of their upbringing.

Returners, on the other hand, depart for a short amount of time with the overall intention of coming back to their community. Their homecoming is often “against their own financial interests” (Carr & Kefalas, p. 126). Instead, decisions to return are based on a desire to be closer to family and to the familiar. In New York State’s capital region, similar factors draw college-educated young adults to move near their hometown (Polimerini & Iorgulescu). For this group, it was not a need to support their families but rather a desire to live more closely to them.

Social, economic and cultural capital are complexly intertwined to impact the migration decision-making of young adults. Differences in economic and cultural opportunities, as well as social relationships within small towns themselves, have shaped the movement of young, educated populations from rural communities to metropolitan areas within these studies. In this sense, it is important to examine the values and characteristics of all young populations that grew up in rural American communities and to understand the movement of these groups to and from small towns in order to fully grasp the impact of the rural penalty. The movement in population impacts economic, social and cultural capital on the community level. As the review of the knowledge gap hypothesis and digital divide theory reveal, access to and use of ICTs are also dependent on these three forms of capital.

Research Questions

With these theories in mind, this research will seek to address the following questions:

RQ1: What role(s) does the seeking of economic, cultural or human, and social capital have on migration decisions of young populations growing up in rural areas?

- a. Which form(s) of capital are most sought after by this population?
- b. How are these forms accessed through migration decisions?

RQ2: How does access to and adoption of ICTs in rural areas of the United States affect the migration of young, educated populations?

CHAPTER III

RESEARCH METHODS

To address the research questions, a case study using the technique of in-depth, semi-structured interviews was used. This type of approach, note Drumwright and Murphy (2004), helps to reveal “the meanings that individuals give to their actions rather than to predict their behavior” (p. 8). As Yin (1994) explains, the case study approach is useful when research questions seek to establish a framework for future inquiry, as was the case here. The research questions, as previously mentioned, grew out of my personal experience and the concern I felt regarding inequities in access to the various forms of capital and also to ICTs. My initial assumption was that others shared similar considerations as I did in their migration decision-making, a rationale that was supported through academic attention to the role of economic, social, and cultural capital in the migration of young and educated rural populations. However, what was missing from the research that was reviewed was if and how the access to and use of communication technologies might influence migration decisions.

As a case study, a look at one group of young adults from a rural area permits a glimpse at a complex array of processes. Yin explains the value of the case study approach when investigating a contemporary situation. Understanding the migration of young adults from a rural community requires a look back at their experiences growing up in that location. Additionally, all interview subjects are still in the midst of their young adult years and thus also still in the process of migration decision-making. Ergo, these individuals are still living the experiences on which they were being asked to reflect.

Research Design

The objective of this case study was to better understand the personal experiences of a small segment of America's rural population. To meet this goal, in-depth, semi-structured interviews are one method to meet this goal. As Seidman (1991) explains, interviewing allows for individuals to "reconstruct his or her experience within the topic under study" (p. 9). Speaking directly to young adults who came of age in a small town in the United States allows these individuals to come to their own conclusions as to what role, if any, access to and use of ICTs played and continues to play in their migration decisions.

In his organization of the in-depth interview process, Seidman puts forth a three-step approach over the course of multiple interviews. The objective is to reconstruct past and present experience and finally to consider the structure of meaning making. For the purpose of this case study, I addressed these three areas in one interview. Access to and use of ICTs as well as migration motivations occur and change over the span of a lifetime within a variety of contexts. Participants were asked to reflect on only a portion of that time, specifically high school through the present day, which was no more than a 14-year period. The objective was to understand the individual experience throughout that time and fragmenting the conversation could have disrupted the fluidity of that narrative. In addition, Seidman highlights the importance of repetition and consistency. As only a single interview could be guaranteed from all participants, condensing the process into a single meeting ensured that the responses from each individual were given the same weight in the analysis.

A series of interview guides were developed according to the goals Lindlof and Taylor (2002) outline to keep the conversation more informal and flexible. The guides included nondirective questions to gain a narrative understanding of each individual's past and present experience. More directive questions were also used to keep the discussion within the framework of common understanding of the definition of ICTs.

Altogether, three interview guides were developed (Appendices A, B, & C) with one used during each interview. These guides were outlined using Carr and Kefalas' four-migration categories. Returners and Seekers were asked the same set of questions as they both represent populations that have left and returned or who are most likely to return. Achievers and Stayers each had their own questionnaire.

A majority of interviews (16) were conducted in person. Since not all interview participants were located in a distance close enough to meet in person, other methods were used for their interviews. Two (Scott and Bruce) were held using the online video communication program, Skype. Maria and Jonathan were interviewed through the phone.

Selecting participants using the migration categories established by Carr and Kefalas allowed different experiences to be compared. As Carr and Kefalas observe in their study of a rural community, learning about the experiences of only one migration group falls short in painting a complete picture of a complex phenomenon. Through open coding, the range and type of categories were defined throughout the coding process. Initially, the research centered on brain drain, ICT access and Rogers' (1962, 1995) diffusion of innovations theory. However, during the interview process, diffusion of innovations was not emerging as a theme and therefore it required a review of how the

interview responses were actually unfolding. After stepping back midway through the interview process, the lens of analysis shifted from diffusion to an emphasis on economic, social and cultural capital. The research and interview questions remained the same, but how the responses were coded became centered on the discourses of capital. In the end, the concepts outlined by Carr and Kefalas emerged as the dominant themes of the interviews.

Case Study Population and Recruitment

This research project took the single case study approach, with residents drawn from one community, Fort Ann, in upstate New York. The location was chosen for a number of reasons. The first was due to convenience. The town of Fort Ann is where I grew up and where my family continues to reside. The connections I have to individuals in this community assisted in the recruitment of interview participants.

Additionally, Fort Ann is located in the northeast corner of the 837-square acre, rural Washington County. The county lacks a city center or institution of higher learning within its boundaries, two features which Carr and Kefalas note as potential factors for impacting migration to a location. Warren and Saratoga counties, which neighbor Washington to the west and southwest, do have one or both of these features. A consideration of the proximity to these features and their role in participant experiences are issues that will be addressed in the findings section of this paper.

The town of Fort Ann was reported to have a population of 6,190 according to the 2010 U.S. Census, more than 300 less than recorded in 2000. Of the residing population, only 8.4 percent have completed a Bachelor's degree or higher with 57.1 percent

attaining a high school degree or slightly higher, 16 and 23 percent lower than the national average, respectively (U.S. Census Bureau, 2000).

Fort Ann was also a good selection for this study as it presents typical case sampling. The economy of Washington County matches the low-tech industries that McGranahan notes as characteristically rural: it is largely agricultural, with industry and government (primary and secondary education, state prison) jobs as driving the economy. Altogether, this population met what Lindlof and Taylor (2002) see as vital for selecting participants because they were most likely to have experiences in line with answering the research questions.

Twenty individuals from Fort Ann were interviewed between December 18, 2010 and February 28, 2011. Each interview lasted between 30 and 60 minutes. Participant ages range from 25 to 28 years old, what Carr and Kefalas refer to as the “mature transition group” (2009b, Behind the Scenes with the Sociologists section, para. 5). Half the participants were male and half were female. A majority (14 participants) graduated high school in 2002. The remainder graduated in 2000 (2 participants) and 2001 (4 participants). Table 1 shows the breakdown of participants based on graduation date, educational achievement, and ICT use. The designation of individual participants in this study is represented through the use of pseudonyms to maintain the anonymity of those involved.

Table 1
Fort Ann Participant Overview by Migration Group, Education and ICT Use

	Graduation Year	Educational Attainment	Primary ICT Use in High School	Primary ICT Use Current
Achievers				
Melissa	2000	Master's	Phone (landline)	Email
Scott	2002	Bachelor's	Face-to-face	Email; Phone (mobile)
Maria*	2002	Some college	Instant Messenger	Phone (mobile, texting)
Bruce	2002	Master's	Face-to-face	Phone (mobile, texting)
Emily	2002	Bachelor's	Phone (landline)	Phone (mobile, texting)
Seekers				
Rick (M)	2002	High school	Face-to-face	Phone (mobile)
Debbie	2002	Some college	Phone (landline); Write letters	Facebook
Skip (M)	2002	Associate's	Phone (landline)	Phone (mobile, texting)
Jonathan (M)	2001	High school	Face-to-face	Phone (mobile, texting)
Jeremiah*	2002	Associate's	Face-to-face	Phone (mobile, texting)
Returners				
Janelle	2000	Master's	Write letters	Facebook; Phone (mobile, texting)
Jessica	2001	Master's	Phone (landline)	Facebook; Phone (mobile, texting)
Luke*	2001	Some college	Face-to-face	Email
Jamie	2002	Bachelor's	Face-to-face	Phone (mobile, email, texting)
Danielle	2001	Bachelor's	Phone (landline); Write letters	Phone (mobile, texting)
Stayers				
Vicki	2002	Associate's	Phone (landline)	Email; Facebook
Jenni	2002	High school	Phone (landline)	Phone (mobile, Facebook, texting)
Paul	2002	High school	Face-to-face	Phone (mobile, Facebook, texting)
Venita	2002	Some college	Phone (landline)	Facebook
David	2002	Master's	Face-to-face	Phone (mobile, texting)

* Not Facebook user at time of interview (M) Denotes military experience

Recruitment occurred primarily through Facebook, a social networking website with more than 500 million active users worldwide (Facebook.com, 2011). Prospective participants were contacted with a Facebook message to gauge their interest in taking part in the survey. This method of contact was an easy entry of access that also provided information on where participants currently live and, in some cases, educational attainment, marital status, and employment. Altogether, interview participants recruited were acquaintances but individuals who I had not maintained contact with regularly since leaving Fort Ann.

Since this case study was investigating differences in ICT access and use, I also contacted individuals who were not Facebook subscribers. Three out of 20 interview participants did not have an active Facebook account at the time of the interview (Jeremiah joined Facebook a few weeks after the interview took place). At 15 percent, this is shy of the average number of young adults who do not use social networking sites (28 percent) (Lenhart, Purcell, Smith, & Zickuhr, 2011).

Interview subjects were purposively chosen through a convenience sample. As Babbie (2010) explains, purposive sampling helps “to study a small subset of a larger population in which many members of the subset are easily identified” (p. 193). Individuals were chosen based on graduation date—2000 to 2005—and on which of Carr and Kefalas’ migration categories they appeared to best match. To determine in which category the individual fell and subsequent interview guide to use, each participant was asked a number of questions based on the characteristics of the four migration categories that Carr and Kefalas described. Achievers answered yes to graduating in the top 10 of their high school class, having lived away from home since graduation or shortly after,

and having not intended to return to live in Fort Ann. Seekers were not ranked in the top 10, had either attended community college or joined the military following high school graduation, and may or may not have the intention of moving back to Fort Ann.

Returners were asked if they had lived away from Fort Ann permanently for at least two years before moving back. Finally, Stayers were those individuals who had consistently seen Fort Ann as their place of residence during and since high school.

Additionally, participants were selected based on where in Fort Ann they grew up. This was important to consider since access is not consistent even within the town itself. For instance, disparities in cable access, which could provide broadband Internet service, existed between the village center and the periphery between 2000 and 2005 and continue to exist to this day. Selecting participants from only one end of the spectrum would not permit a full understanding of the diversity of experiences with ICTs.

A broad definition of ICTs was maintained throughout the investigation rather than narrowing it to Internet access through computers. Rural wireline broadband matters, but it is not the only means for taking part in the digital world as access is increasingly being provided through mobile devices. Furthermore, participants were asked their preferences in communicating and not a specific ICT in order to avoid leading questions. This broad definition was maintained with the intent to permit participants to convey their unique experiences.

In addition to the interviews, participants completed a brief questionnaire (Appendix D) soliciting information about their access to and use of communication technologies both during high school and in the present day. This data serves to outline the access and use of participants during high school and in their current location. All

other demographic and ICT access and use data was gleaned from the interview responses.

CHAPTER IV

FINDINGS

This chapter provides a detailed summary of the findings for each migration group—Achievers, Seekers, Returners, and Stayers. Participants were born between 1982 and 1985 and spent the 1990s in elementary and high school. The social networking website MySpace was already active when they graduated high school, and their college years were marked by the introduction of Facebook. Only one participant, Melissa, reported having broadband Internet while in high school. None of the participants expressed feeling digitally left out. Overall, in instances where a digital divide existed, adopting and using other technologies helped to overcome it.

Shared ICT Access and Use Characteristics Among Migration Groups

Each migration group had specific themes among its members. A number of characteristics also emerged that were shared among all four groups. In what ways these traits manifest themselves for each migration category will be discussed in detail in their respective sections but the following provides an overview of the similarities.

The importance of attaining and maintaining social capital emerged as a priority for members of all four groups. Consistent with the findings of Snyder et al. (2006) and Carr and Kefalas (2009), social capital plays a central role in the residential aspirations and migration decisions of the young adults interviewed. Each participant shared a similar response to the first question: What was it like growing up in Fort Ann? Across the board, interview participants pointed to the small class size and the opportunity to get

to know everybody as a positive aspect of growing up in the town. Furthermore, social capital was a driving factor in ICT use although it emerges differently for each group.

All interview participants adopted new ICTs after high school. There was no clear pattern, however, that differentiated when and what was adopted based on migration category. Each group was equally mixed with individuals who quickly embrace new technologies and those who are slow to warm up to them. Early exposure to ICTs also does not appear as a determinant of later use. The one participant who had wireline broadband access in high school did not decide to get a cell phone until her senior year of college. Additionally, she has never owned a cell phone with anything more than calling and texting capabilities, finding Internet an unnecessary expense. What this suggests is that migration category alone cannot explain actions taken to acquire and use new technology.

The different migration groups also share an overall disconnect between the modes of communication they value as compared to what they actually use. Half of the interview participants express that face-to-face communication was the means that they most value or see as currently lacking among their peers and younger generations. However, not a single individual interviewed from Fort Ann points to such interaction as their primary mode of communication or the means they feel they cannot live without.

Finally, the overall educational attainment of the Fort Ann migration groups differed slightly from that of Carr and Kefalas. For instance, two of the Achievers started out locally at Adirondack Community College (ACC) in neighboring Warren County, New York rather than immediately departing. On the opposite end of the spectrum, two of the Stayers completed coursework at ACC. This is different from the characteristic of

a Stayer as outlined by Carr and Kefalas to be an individual who has not attended college and may not have even finished high school. In total, eight of the 20 interview participants attended classes or earned a degree at ACC. The close proximity of Fort Ann to ACC, about 12 miles away, may explain this connection.

How these relationships function within each group will be explored in this chapter.

Achievers: “I guess I wanted to be a trailblazer.”

. . . leaving is a gradual process that most young people must be persuaded to undertake: years of planning and preparation go into making a new life someplace else . . . What the Achievers will remember most are the parents, aunts, uncles, neighbors, and teachers who believe in them. When people are loved, supported, and at ease, moving away is not their natural priority, but these concerned adults convinced the Achievers that they owed it to themselves and to the people they left behind to experience the world. (Carr and Kefalas, p. 41)

Most prevalent in the discourse surrounding the ills of rural America is the impact the departure of young, educated populations has on the human landscape. With this in mind, the review of findings begins with this migratory group. The Fort Ann Achievers interviewed were all in the top ten of their class—including a valedictorian and a salutatorian. They represent a mixture of educational attainment after high school from a master’s degree, to a bachelor’s and an associate’s. Like the Achievers identified by Carr and Kefalas, this group recognizes the support of family and other adults in the community to help them achieve success, but finds that social ties were not enough to keep them home. Missing opportunities described by the Achievers express a sense of

isolation. Fort Ann left them feeling limited and secluded from the wider world beyond the town's borders.

The Achievers that were interviewed covered the widest range of ICTs access in high school. Looking back, Melissa was the only Achiever and the only individual interviewed who had broadband Internet at home while in high school. The remaining four Achievers had dial-up in their home, similar to their peers who were categorized as Stayers, Seekers and Returners. All five have broadband where they currently live, although speed and availability is mixed in their parents' homes: Melissa, Scott and Maria have wireline broadband, Emily has satellite Internet, and Bruce is split, with one parent having high-speed access and the other lacking it.

It Takes a Town

The network of social capital in the small community is the most dominant positive aspect about growing up in Fort Ann identified by the Achievers. All of the Achievers appreciate the small class size and closeness to friends that they had in Fort Ann. Bruce explains, "It was a lot of fun, actually, just because it was a small town. Everyone knew pretty much everyone else." He points to the camaraderie shared among members of his sports team and how "sometimes, it felt like the entire town of Fort Ann would come to watch" athletic competitions.

In many ways social capital helped to create opportunities for the Achievers beyond what their existing economic and cultural capital could provide. Emily attributes her "strength and encouragement and self-confidence" to the support of teachers, coaches and family members:

People in the town looked up to us . . . We were at the top of the class and teachers thought that we were an example to other students . . . I just felt like I was always being told that I was doing things right and never that I was really doing things wrong.

However, the small scope of available social capital was also very limiting for Emily:

[In Fort Ann,] everybody is sort of cookie cutter and looks the same and talks the same and acts the same and thinks the same, and you sort of get a very small sense of what the world is like . . . I just wanted to grow and see the world. I knew that there was more out there, you know. I knew it was out there and I just needed to experience it for myself.

Despite the foundation of strong social capital, critiques of Fort Ann point to a deficit of opportunities for human and cultural capital attainment in high school. This ranges from the lack of preparation in English class (which was “a joke” to Maria) and missing out on Advanced Placement classes (Bruce) to not enough homework (Maria) or sports teams to join (Melissa). The strengths and the shortcomings of living in Fort Ann were not always clear-cut. “Now that I’ve left,” explains Melissa, “I know that maybe there were some opportunities I didn’t have. But I never felt like I went without opportunities either.”

Economic Values in Migration, Educational Attainment and ICT Use

Melissa’s experience is shared by her peers: Fort Ann was good enough while the Achievers lived there and they appreciated the strong social ties, but moving allowed them to see and do more. Although the Achievers identify human and cultural capital as what they felt they lacked most, economic capital attainment is a more prevalent factor in

migration decision-making among Achievers than it is for the other migration groups. How this connection manifests itself does, however, differ within the group.

Bruce, who works in computer design development, addresses the limited opportunities for such work in and around his hometown. “Jobs was probably the big motivator, or the big reason for not being in Fort Ann,” he explains. “I guess the only reason why I’m not in Fort Ann or in an area like Fort Ann is mainly because of work.” He adds that “lack of technology” would also keep him from moving back since his career goal of working in game design development is directly related to having that access.

Maria and Scott mention the role of economic capital but in different ways. Economic capital placed a limitation for Maria. Although her goal in high school was to attend law school, she feels she was ill prepared financially when she left Fort Ann to attend college. Scott associates his most valued communication means with work rather than having technology-related goals driving migration. The importance of economic capital surfaces with him when discussing which ICT he cannot live without. His top choice is email. He explains, “email makes my job so much easier so if email was taken out . . . it makes life very hard.” All other ICTs he can go without, but Scott views email and its role in his attainment of economic capital as a necessity.

Staying Close by Staying Connected

A direct connection between economic capital, migration and technology use is not central for the other Achievers. Instead, their focus was on the importance of having a job in their decision to initially leave and now decide not to return to Fort Ann. For these Achievers, they did not discuss a link to technology to fulfill this goal. Emily describes

how she “didn’t have a job yet” after finishing her bachelor’s degree and lived at home for a few months, working as a waitress at a local restaurant. But that type of work was not fulfilling. “I really started to get antsy. ‘I need to do something with my life.’ Like I graduated. Now it’s time to do something.” Shortly afterward, she found a job with an investment firm in New York City and has lived there and worked in finance ever since. Job opportunities are a major factor in Melissa’s migratory decisions. “If I was coming here, it would be for other reasons and I would just deal with whatever the communication issues might be,” says Melissa. “There would have to be a job, obviously, that I was really wanting . . . I think there’d have to be a pretty significant life change.” She also cites the expense of having a mobile phone with Internet as a deterrent to adoption.

For Bruce and Scott, their most valued communication means are both work related and computer centered. The driving purpose of technology use—to stay connected to family and friends—is consistent among the remaining Achievers. Initially, mobile phone adoption was centered on a sense of necessity to communicate with family and friends. For instance, most participants cited getting their driver’s license and the safety concerns and need to contact a parent as reasons for getting their first cell phone.

Emily explains that in Fort Ann, “my whole world was the people that I would bump into. My world was very small, you know. I didn’t have a cell phone. I didn’t have anyone to call who didn’t live in Fort Ann.” She now cites text messaging and Facebook use through her iPhone as her top communication means. In fact, the majority of Achievers (four out of five) listed cell phone or texting as the communication means they cannot live without. The need for their technology of choice is not work related but rather

that mobile phones serve as their main way to connect with friends and family. Maria summarizes the relationship between technology use and social capital when she explains, “I think it’s necessary to stay in contact them if you want to stay close to people that mean something to you.”

Maria, who grew up in a bilingual household, expresses a communication value unique from any of the other interview participants. “I think everybody should at least have a second language,” she explained. “I think that’s really crucial.” The value is connected to her social ties. Her self-described Spanish-English language mix was a way she could and continues to communicate with her family in New York City and Puerto Rico.

Even though the Achievers moved away without the intention of returning, the strength of social connections to Fort Ann is evident in their migration decisions. Johnson et al. (2005) explain “strong attachments to place” may hold back rural youth nearing adulthood from “attending school at a distance from home” (p. 103). This finding is consistent among the Achievers. None of the Achievers wanted to stray too far away from home when deciding where to attend college. Maria and Rick both lived at home and attended a local community college for two years. Melissa, Emily and Scott attended four-year colleges within three hours or less from home. As Emily says, “I knew I had to be far enough away that I couldn’t run home every weekend if I was sad, but that it was close enough where I really could get home if I needed to.” Melissa, who was a 45-minute drive from her parents’ home, knew she wanted to be within four hours so that she could come home on the weekends.

The first move after college was an adjustment before moving farther away to more populated areas. “[My wife and I] wanted to get a change,” explains Bruce. “Almost for me and my wife, to kind of start our own lives. To kind of get out, nicer areas, to do stuff we want to do but never had the possibility to, to do maybe in the future.” Scott moved to North Carolina to get away from New York, where he had attended four years of college. “I didn’t have anything holding me back,” he explains. “I guess it was just as good a time as any.”

Although he appreciates the short plane trip home—California, he explains, would have been too far away—Scott wanted to stretch beyond the comfort of his surrounding family. “At the time, everybody was around there [Fort Ann].” He continues, “I guess I wanted to be a trailblazer.” As the Achievers moved away from home, they had more and more opportunities to expand in areas they felt they lacked.

Social Influence in Adopting ICTs

For a majority of the Achievers, their adoption of new technology was not accomplished through their own desire or seeking. Instead, their friends or family members oftentimes introduced them to new ways to communicate with people. As they moved away from Fort Ann, they began to adopt more technologies. Social ties are the most prevalent way in which Achievers cite their introduction to and subsequent use of new ICTs. While in college, Melissa recalls “a bunch of my friends were on [Facebook].” She acknowledges that she was slow to adopt but, thanks to the encouragement of her friends, is now “a Facebook freak.” Bruce explains that attending a “tech heavy school” provided an earlier exposure for him to Facebook and other communication technologies. “A lot of newer technologies run through all the students and everybody finds out about

everything through all their friends.” In describing when she first got a cell phone her sophomore year of college, Emily explains that her boyfriend at the time talked her into it. Finally, Maria went without high-speed Internet in high school until, while living at home and attending the nearby community college, her parents decided to upgrade from dial-up.

Achievers also use ICTs to strengthen their connection with individual members of their social network. Scott, an avid user of AOL Instant Messenger and ICQ chat, was described by one of the Stayers (David) as introducing him to the new technology of instant messenger in high school. Melissa, the only blogger among all the interview participants, decided to start her food blog as an opportunity to more efficiently connect with people. “[Blogging] was a fun way to write and just share recipes rather than writing it on a card or emailing it to someone. It’s like . . . I can share it with tons of people.” For Scott and Melissa, their technology use is both framed by and a frame for their social bonds.

Members of the Achievers group are the only individuals interviewed who describe a perceived social stigma with mobile phones as slowing down their adoption. This may help to explain why, even when social ties were strained due to distance from home, use of ICTs such as mobile phones was delayed after initial exposure. Before moving from New York to California for a job, Bruce explains that he “always perceived the Blackberry and iPhones and other smart phones as being more than what is needed. A cell phone is about getting in touch with people and it didn’t really need to be more than that.” However, since adopting the iPhone about a year ago, he appreciates his new phone in allowing him access to Facebook, easier text messaging, and games and applications.

As previously noted, Emily did not get a cell phone until her sophomore year of college. An undesirable social attitude toward cell phones slowed her adoption. “It was a bit of a stigma,” she explains. “My mom always felt it was a little bit rude when people were always on their cell phone.” Additionally, the balance of cost and need was a deterrent. “It was too expensive. I don’t know, I never really needed one until [sophomore year]. Then I was like, all right, guess I’ll get on the bandwagon.” Now, Emily is an iPhone user who describes her phone as “my right hand,” with her at all times.

Digital Divide as a Welcomed Reprieve

For a number of the Achievers, the differences in quality of ICT access between their home and the location where they have since moved is a welcomed break from their technology-filled everyday lives. Rick’s parents have both left Fort Ann—his mother to a neighboring town and his father to North Carolina. Neither of them have reliable cell phone service in their new homes. He explains, “most of the time, it is actually nicer to have less technology going on [at home]. It’s kind of like a relaxing getaway from all the flood of technology that’s in my everyday life.”

Although her feelings have changed overtime, Emily now shares a similar sentiment:

It was kind of annoying before my parents had HughesNet [satellite Internet]. They had dial-up and it made me not want to go on the Internet at all. It was annoying . . . Now I like it . . . It’s a time where I just stop doing all the normal stuff and just sit and be with family.

Just as Carr and Kefalas found in their case study, the Fort Ann Achievers had the social support to leave the town. When it came to migration decision-making and educational attainment, economic capital was most prevalent in the responses from the Achievers but was not generally directly connected to technology use. However, the introduction and use of different ICTs is strongly influenced by the same social encouragement that helped bolster their departure. It is primarily through the encouragement of friends and family or the discouragement by a social stigma that dictates their adoption.

Seekers: “Hey. Here’s Life.”

What the Seekers know, with the utmost certainty, is that they do not want to stay in the countryside all of their lives . . . Seekers possess a powerful, albeit unfocused, longing for something different: there is restlessness and impatience in their wishes, and eagerness for the unknown pushing them to see what the world beyond . . . might offer. (Carr & Kefalas, 2009, p. 95)

As individuals with the ambition to leave but often lacking the economic, cultural or social capital to depart, Seekers are young adults who decide to leave without the guidance and encouragement that is granted to the Achievers. This departure is often permitted through enlistment in the Armed Forces. Three of the Seekers interviewed from Fort Ann have military experience: Rick has been discharged while Skip and Jonathan remain on active duty. Debbie and Jeremiah left Fort Ann—according to each of them for good—without having to enlist but also without the economic or cultural capital of the Achievers.

Overall, human and cultural capital attainment is lowest among the Seekers as compared to the other migration groups in the case study. None of the Seekers have completed a bachelor's degree, with Debbie, who is just shy of a two-year degree, and Jeremiah and Skip finishing their associate's, representing the highest educational attainment of the group. Like the Achievers, the Seekers express wanting more than what Fort Ann could offer but had to find out what that was on their own and without the support of the entire community.

Skip sums up the Seeker experience when he explains:

I pretty much envisioned myself out of Fort Ann at some point. I just didn't know where yet and I hadn't seen enough places to decide . . . I guess somewhere inside I just always thought there was something out there. Not that I've found anything better.

“The Grass Isn't Always Greener”

In looking back on their experiences in Fort Ann, social capital is a primary asset identified by the Seekers. Jeremiah appreciates growing up in Fort Ann “because you got to know a lot of people,” citing his luck of having most of his best friends grow up on the same road as an example. Jonathan marks a similar positive quality:

It was an awesome experience for me versus growing up in a town that is so big that, you know, you are just a nobody at school because there are thousands of kids in school . . . It was just good for me to grow up with all the people I grew up with just because we were so close.

Skip and Debbie also recognize their closeness to friends as highlights of their experience growing up in Fort Ann.

The Fort Ann Seekers were as eager as the Achievers to see what lay beyond the town. Now, however, all but Jeremiah realizes that they prefer to live in a rural community. Rick recalls how a social network limited in size turned out to be strong in value:

I could tell you everybody that went to the school, probably from four years ahead of us to four years behind us also . . . I think when I was in school, I didn't like that fact. But now that I'm out, that's what I like, you know. It's just when you get older I guess you see back and realize now. I guess it made me more diverse. Because you only have a select group of people, you have to get along with everybody, instead of having your own little clique where you just have to get along with that one clique.

Rick carried over this ability to interact with different people to his first U.S. Air Force assignment in North Dakota. Upon arrival, he met a handful of airmen who had grown up in communities near Fort Ann, connecting particularly well with one individual because he too was from "another small school." Furthermore, he feels he was well prepared for life after high school because of the close relationships he had with teachers. When he joined the Air Force and now in his job at a mill, he explained that he never had trouble communicating with authority figures thanks to the close friendships he had with teachers in Fort Ann.

Explains Rick, "a lot of the stuff that I realized that I liked or disliked, I never actually really realized until I got out of there." Following a shortened commitment to the Air Force, he decided to return to Fort Ann "because I realized the grass isn't always greener on the other side. It's the same no matter where you go so you might as well go

back to where you're comfortable." Although not part of his initial goals, Rick decided to return home where he could be around his family and where he has since gotten married and started his own family in the same place where he grew up.

Skip, who currently lives in a small community near Denver, Colorado, echoes Rick's response. "The time I was in the small town I wanted to live in a bigger town. But now that I've been around and I've seen bigger towns I think I like small towns better." When he went out into the world he was restless to see, his appreciation for the simplicity of small town life only intensified.

The Seekers desire to experience something different than what Fort Ann could offer but they are not very critical of their opportunities for human and cultural capital attainment. Only one Seeker, Jeremiah, discusses the limitations he perceives to education in Fort Ann. He explains how he felt his education should have been better in a small school because he "thought there would have been more interaction" with teachers. He describes how a bad relationship he had with a teacher could not be avoided, as the school was not large enough to have another individual teaching the subject. "I actually felt like, because larger schools usually have more resources and funding, or what not, to have more staff, I feel like I probably could have maybe excelled at more things."

Altogether, Jeremiah believes he could have done better academically at a larger school.

Debbie, who feels that Fort Ann did prepare her to start college, still wishes that there were more extracurricular options. Her decision to stay where she currently lives in New York's Capital Region, affords her a greater chance for cultural and human capital attainment than what Fort Ann can offer. Having fallen just short of finishing her associate's degree, she hopes to soon start the process to get her paralegal certification. In

the city, she has “more options” for schools, with “a lot more colleges down there” and “within miles from the house.”

Seekers express the most criticism in how their peers and members of younger generations communicate with each other. Seekers had the most group members—three out of five—identify face-to-face interaction as the most valued form of communication that they believe to be missing now. Rick hopes his four-year-old son will “have the chance to get good at one-on-one conversation,” as he shares that his teenage cousin has trouble carrying on a conversation from spending too much time on the computer. Jeremiah adds, “there are people who sit in front of their computer all day and just look at everybody else’s [Facebook page] . . . Instead of going to their friend’s house, they would rather just look at their friend via a 17-inch screen.”

Nevertheless, this favored communication means is not what Seekers actually use on a daily basis. Rick and Debbie rely on calling friends and family using their cell phones—both of which use smart phones—while Jeremiah, Skip and Jonathan communicate primarily through text messaging. Although Seekers had the most members express this value, each migration group interviewed from Fort Ann have individuals with a similar sentiment who were equally as contradictory in their actions.

Seeking Out ICTs

As described by Carr and Kefalas, Seekers are independent actors. This quality is most visible in the lack of influence from friends or family members on the Fort Ann Seekers to adopt new ICTs. In characteristic Seeker fashion, Jeremiah could not rely on someone else to provide the technology he wanted. He bought his own computer in high school when he was interested in collecting sports cards and buying and selling them

through E-Bay. “Most things my parents never bought for me. Like, I want it, why should they pay for it, you know. I’d rather go rake a few lawns and just do it.” Similarly, Rick took personal initiative and used his high school graduation money to buy his own laptop.

Debbie is the most direct about her autonomy in trying and using new ICTs:

I taught myself a lot about computers . . . Just learned a lot more on my own and just keep doing what I’m doing on the computer until I learn it. And then I just feel like I have gotten myself more prepared for work and anything else that needs to be in my life . . . Shortly after college, I really got big on computers . . . I got a computer for my house just because I wanted to have it . . . And I just started learning stuff, checking email and surfing. I’m a quick learner. I’ll play with something until I’ve learned. I don’t read the manual. I mess with the phone until I’ve learned it. And it took me about a month but, I don’t know, I was just really interested in all that was out there.

Taking initiative does not necessarily equate to early adoption for the Seekers. For Skip, his independent action delayed his access and use. He shied away from new technology—in this case Facebook and a smart phone—despite having friends around him who were adopting it. In 2009, he finally started a Facebook page only when he decided it would help him stay in touch with friends from basic training. Joining Facebook allows Skip to maintain social ties, a decision he made on his own accord rather than through the guidance of others.

Better Opportunities and Strong Ideals, No Roots Required

Outside of wanting to see the world beyond Fort Ann, members of the Seekers group cited economic and ideological reasons for leaving. Jeremiah decided to leave due to what he sees as more economic opportunities outside of the town:

I think leaving a small town, I mean, it helps to show that sometimes you got to just try something new, whether it works or it doesn't work . . . But by staying, I'm not saying that people can't be successful . . . but I think sometimes by leaving you just, you at least know, 'Ok, there was more out there.' Or, 'You know what, I'm happy with my life, I enjoy living in my little country house.'

At the same time, his reasons for likely not returning are rooted in economic capital attainment, describing how he can have a better salary as a manager at the chain grocer where he is currently employed if he moves to a more populated area. For Jeremiah, economic capital will help him in supporting his family in the future.

Jonathan perceives his lack of readiness to go out into the world after high school as a fault of his own, citing missed school days during hunting season as impacting his academic performance. "I wasn't prepared for life whatsoever," he explains. "It was quite a shock when I graduated and walked out those doors. You're like, 'Hey. Here's life.'" Of all the 20 individuals interviewed, he was the only to describe his goals as rooted in ideology:

Leaving Fort Ann is probably the best thing I ever did. For one simple reason and on simple reason only: it is, for me being a patriot—and I could have gone and applied and been a police officer or I could have done something like that—but it wasn't enough to me. And there was really no place to prove myself or devote my

life to the United States in Fort Ann. You know you can sit there and be a patriot and support soldiers and airmen and sailors and the coast guard. You can do that all day long, but to actually leave your hometown behind, and actually go there and do it. That was the only way for me.

Moving away from Fort Ann allows Jonathan to make the sacrifice that met his values and objectives.

Excluding Jeremiah, the Seekers express an interest to live in a small town but not a particular attachment to their roots in Fort Ann. Now that he is close to completing his military commitment, Jonathan does not foresee an immediate return to Fort Ann despite his desire to have his son attend school there. Economic reasons are holding him back, with high taxes in New York and a perceived lack of available job opportunities creating a migration barrier. With a job opportunity awaiting him with his father-in-law in the Midwest, he is moving his family there for a year to see how it works out. “If I like it, I’m staying. If I don’t, then we are probably going back to New York.” Rick appreciates living close to family but would just as easily move “to some backwoods town in Tennessee.” Debbie and Skip both agreed that they would like to live in a small town, but it did not have to be Fort Ann.

Altogether, the Seekers wanted something different than what Fort Ann could offer. They appreciate the close social connections with people in a small town but it was not enough. Whether through migratory decisions or use of ICTs, they rely on their own initiative to go and get the something different that they desired.

Returners: “Small Towns Without Towers”

They have chosen the safe and familiar, and, like young people of another time, they have no desire to delay pursuing the more traditional goals of early adulthood: marriage and family . . . The Returners might come home after the outside world fails to live up to its promise and bet their futures on their hometown holding on just a little bit longer. (Carr & Kefalas, p. 23-25)

Being away from home was not all it was cracked up to be for the Returners.

They enjoyed their time away but missed their family and other social ties in Fort Ann.

The Returners who made up the interview sample are the most diverse age range with representation from the graduating classes of 2000 (Janelle), 2001 (Jessica, Luke, and Danielle), and 2002 (Jamie). Their educational attainment is also mixed with two master’s degrees (Janelle and Jessica), one completing some master’s (Jamie), a bachelor’s (Danielle) and some college (Luke). Despite the diversity of the group, they share an attachment to a place they call home and to the people who make it a community.

The Driving Force of Social Capital

Returners value the opportunity to go see the world, but in the end, a connection to family has drawn them back home. Altogether, the Returners are not inclined to discuss economic factors in their migration decisions or relationship to communication technologies. The reasons the Returners accept and use ICTs weighs heavily on maintaining a social network that include connections from home and from the world they experienced while they were away. New ICTs adopted after high school provide a means for the Returners to stay connected to old friends but also to build relationships

with new ones. Jessica and Luke explain how they both started using instant messenger when they first began college—Jessica in upstate New York and Luke in Long Island. “I hardly got on the phone to contact a friend because you talk to them every day on the computer,” explains Luke. “Family, I would always make a call to family.”

Upon their arrival back to Fort Ann, the Returners adjusted their ICT use based on what was available to access. They could no longer depend on the reliable wireline broadband and mobile access they had while away. Before moving back with her parents where only dial-up is available, Jessica and Luke signed up for satellite Internet that would be ready as soon as they moved in. They recently bought a house down the road that, like her parents’ home, lacks wireline Internet. Instead, the couple has a portable mobile hotspot through a wireless service provider that connects up to five computers with third generation, or 3G, wireless Internet. Rather than go without access, Jessica and Luke have found ways to overcome the digital divide.

In other cases where a Returner has moved back in with a parent, their primary mode of communication is dependent on their family. Janelle and Danielle both moved back home when they returned to Fort Ann. Lacking reliable cell phone service, as Janelle explains she lives in one of those “small towns without towers,” she must often use her parent’s landline phone if her communication goal cannot be met through online means. Danielle, along with her four siblings, has a family cell phone plan with their mother because it is “more convenient and cost effective” to connect in that way. She adds, “with [my son] Hayden, it makes it a little harder to get on Facebook . . . My cell phone is the best way to get in touch.” In this case, Danielle’s attention to her son shifts her use away from one type of ICT to another.

The Returners' use of ICTs allows them to have a connection to the different worlds they have moved between. While away from home, Internet access, explains Jamie, "makes it easier to communicate with people that aren't close by anymore, which is nice. And even when I was at [college], it was nice to be able to communicate at home." While in college, Jamie used instant messenger and texting to communicate with friends, even texting and calling her mother using her cell phone rather "than having to wait until I got home in three hours and then talk." But now, she has shifted back to primarily using her cell phone. "My mom literally calls it my lifeline," she explains.

The Returners continue to rely on ICTs to connect with others now that they are back in Fort Ann. Janelle uses Facebook to "just reconnect with people." She can keep people who live outside of Fort Ann updated on what is going on in her life, including family members in Connecticut and Michigan. "Even though they aren't around—we can't see each other or be with each other—it's like, they know what I'm up to so it kind of makes you feel closer." For Janelle, this use of Facebook to make up for a lack of opportunity to speak face-to-face with loved ones has made her selective in her friend choices on Facebook.

I feel like that is to communicate with people and don't want to have just random people on there that I don't even want to stay in touch with me . . . I'm kind of picky like that. I need to actually have people that I want on here, like family and friends.

The use of ICTs by Returners is not always meant for connecting with close social ties. The only interview participant out of all the migration categories to be on Twitter was Luke, whose engagement is limited—he follows Howard Stern and two other

personalities from Stern's show along with President Barack Obama but does not actually tweet. Luke is also one of the three interview participants who is not on Facebook. He values Facebook as a means to stay connected with people but spending too much time using online social networks "in a marriage just gets you in trouble," he explains. Instead, he communicates with old friends through the use of Jessica's Facebook profile.

Experiencing the World While Staying Connected to Home

Similar to the Achievers and Seekers who wanted to leave Fort Ann, the Returners believe that there was something outside of their hometown that was worth exploring, even if only for a short time. However, this sentiment is not as prevalent among this migration group. Janelle explains that moving for school to Connecticut "was a culture shock." She was exposed for the first time to different forms of religion and sexuality, and adds, "I didn't realize this was out there, because in Fort Ann . . . we're all Christians, white Christians. We love the opposite sex and that's what we do here." When she returned she was glad she had moved away for a while. People who have stayed, "they don't have that taste of what's out there . . . I've been there so I feel like I'm more well-rounded in a sense."

Jamie shares a similar sentiment as Janelle:

I think it's just a good experience to get out and get away for a little while. I loved my family dearly, I loved the area, and I'm obviously back in the area. But I just feel like it's something that all kids should do to broaden their horizons a little bit is to get out for a little while.

Jessica also appreciates her time away from Fort Ann but could not pinpoint why. "I loved high school and I loved Fort Ann but I just wanted to get away for some time." She

had wanted to move farther away than the two and half hours to northern New York, but realized staying closer to home was more important.

As previously noted, the Returners share with the other migration groups the same disconnect between communication value and actual use. When the Returners explain the ICTs that they use the most and cannot live without, their responses rest on a need to stay connected to family and friends. Janelle relies on Facebook and text messaging for her social interaction. She also recognizes how much her use differs from the type of communication she values:

I feel like nowadays, we don't do this [face-to-face] stuff. It's like everyone is living in a cyber world. And then they go out in public and they can't communicate effectively . . . A lot of times, I should make a phone call instead of going on Facebook but it's just very easy and very convenient.

Although Janelle values personal interaction to strengthen social capital, it does not translate into her everyday ICT use. What she values more is the ability to maintain social ties no matter what means she must use to do so. Janelle's inability to use technology as a social bridge to other people, she explains, would impact her migration decisions in the future. She was once asked to stay at her grandmother's house for four months and went without "a great connection" to the Internet or reliable cell phone reception. "I felt so disconnected and lonely that I'm like, 'No. I can't do it.' I had to come back [home] so I had Internet, phone and TV." For Janelle, access to ICTs is her means out of social isolation. "If I didn't have Internet [in Fort Ann] or cell phone, I would probably need to go somewhere," she adds. "You feel connected to people if you are able to, not that I need to all the time but it's like I have the option."

Jamie shares a similar communication value as Janelle, expressing that people her age “still need the interpersonal, face-to-face communication skills.” Working in college admissions she often finds those skills “lacking with a lot of the younger generation kids.” She mostly communicates to prospective students through email and, interestingly, the college is even looking more closely at text messaging to prospective students. With family and close friends, she tries to maintain that in-person interaction, but admits that most of her communication occurs using her cell phone.

For Jamie, the ability to communicate in the way she most values—through face-to-face connection—is related to the relationships that she had with teachers in a small school.

I think [strong interpersonal relationships] actually can go back to our relationships with our teachers. Because we had those conversations, and it wasn't just you go to class, you learn and you leave. You were able to have a conversation with them, which, if you were in a larger school, that doesn't happen. You don't have those conversations with you teachers. They don't know you for you.

Jamie's close social connection to her teachers helped as she went to college where she felt comfortable approaching professors and getting involved in extracurricular activities.

Altogether, social capital is a driving force in the lives of Returners. They wanted to see something more than Fort Ann but once they left, realized how much they missed the family and friends of their hometown. ICTs became their way to stay connected when they were away and to remain connected now that they have returned. The Fort Ann Returners have just enough access to ICTs to accomplish their goal of maintaining social

connections. They will seek out a connection when one is not available, but in many cases are quite comfortable to not explore any further.

Stayers: “A Slow Moving Town”

Stayers’ most unique characteristic may be how quickly they start looking and acting like adults. They transition to adulthood and families, jobs, and grown-up lives far more quickly than their peers who out-migrate. (Carr & Kefalas, p. 20)

The strongest hold over many of them is that they simply like the town . . . The Stayers don’t long for change and adventure; they prefer, instead, to be surrounded by like-minded people. (Carr & Kefalas, p. 81)

As Carr and Kefalas describe, Stayers are content continuing their lives in the town where they grew up and the Fort Ann Stayers are no exception. Of the migration groups in this case study, the Fort Ann Stayers represent the second lowest in overall educational attainment. David has a master’s degree but none of the other Stayers have received a bachelor’s or higher: Vicki has two associate’s, Venita is a few credits shy of her associate’s, and neither Paul nor Jenni completed a full semester of college. The percent of Stayers interviewed who have a bachelor’s degree or higher (20 percent) is just above the town average of 17 percent (National Broadband Map, 2010). The Stayers were instead focused on securing a job, starting a family and settling down in a place they were comfortable.

Educational Opportunities and Attainment

Like the interview participants from the other three migration categories, the Stayers put the opportunity to “know everybody” (David) and the close connections with

friends and family as the first thing they mention when talking about growing up in Fort Ann. Venita explains:

It's a slow moving town. It really is . . . That's the difference when you get [a city] versus a small town; people, they just aren't as nice . . . We are not a rich town but we're not poor . . . I mean we all know when something happens here. I think it's that we all kind of pull together.

Venita, who was interviewed a few days following the unexpected death of a young man from Fort Ann, uses the recent tragedy as an example of how, even in a rural community, ICTs can help spread news and information at a fast rate. She is not alone in recognizing the support provided by the surrounding community members. For Jenni and Paul, who married and started a family right after graduating high school, they value the close proximity to family that staying in Fort Ann offers.

The Stayers have a low overall educational attainment. At the same time, this group in comparison to the other three is the most explicit in pointing to the lack of human and cultural capital building opportunities while in high school. "We didn't have, you know, a lot of electives and that kind of thing to sort of do different stuff," explains Vicki. "It was just basically, you know, the basics." David wishes that there had been advanced placement classes offered. Paul and Venita felt the lack of educational attainment after high school was due to a lack of support from the school's guidance counselor. The attention from the guidance counselor was lacking to the degree that Venita cannot remember who was in the position when she graduated, and Paul expresses how he felt the guidance counselor, along with most teachers, "didn't really care whether you were prepared or not."

Venita compares the differences in human and cultural capital between her time in high school and those of her high school-aged stepchildren. From her parents, who did not attend college, to the adults in school, she feels as though she was not given enough direction. “It only takes one person to, you know what I mean, to really push and educate someone . . . If you had someone there who was . . . just there to get you motivated.”

A few credits shy of completing her associate’s degree, Venita attributes her involvement in the regional technical education center—the Board of Cooperative Educational Services, or BOCES—with providing what Fort Ann could not offer. She had a full semester of college coursework completed before graduating high school. Venita goes on to explain her difficulty in college math courses as she “didn’t have the greatest math teacher” in high school and thus lacked the fundamental knowledge of the subject. “And if you don’t have those full basics, you struggle.” Venita recognized the lack of guidance from faculty and staff in school and from her parents in helping guide her transition to college. “I think if there was a more active role at school to educate someone about the college choices and their career, it would have helped me better.”

In fact, the only Stayer to complete a bachelor’s degree or higher was the only individual in the group to mention the guidance of the adults in his life in encouraging his educational attainment and future goals. After high school graduation, David was set on getting married, starting a family and entering the work force as a corrections officer. But his father and uncle took him aside and assured him he could do something more fulfilling, and told David that he was “going to go to college.” As he explained, “they knew I was better than that.”

David differs from the other Stayers in that he did go away to college. However, with a weekend job in Fort Ann, a fiancée at home, and leadership positions with one of the town's fire departments, he spent most of his time not in class, but back in Fort Ann. In this sense, he never truly left. "College to me was like a job," he explains.

An Active Life as an Asset of a Small Town

The Stayers are the only group that mention how much they value having access to the outdoors in Fort Ann. Venita, Jenni and Paul all explain their enjoyment of outdoor activities when they were growing up in Fort Ann and also how they wish their children or stepchildren would take better advantage of nature, rather than relying on the computer for entertainment. David goes as far to explain that having an outdoor gear store in the community where he attended college helped him decide that the state university located there was the best college fit for him. In a similar vein, the Stayers are the most likely to mention sports as one area where they wish they had more opportunities growing up. Vicki sums it up when she says that she just wanted "stuff to do . . . Even though we had so much space, we didn't have a place to ski, or cross-country ski."

The Stayers overall just want more to do. For Jenni, this resulted in what she views as a distinctly different childhood than what individuals in more populated communities had:

I think we didn't have the real life experience that maybe kids in the city had. I mean, we were all pretty sheltered, honestly. I mean, living in little Fort Ann we had our parents doing everything for us . . . I definitely think that kids in a city really fend for themselves a lot younger than any of us ever did.

However, unlike the Achievers, Seekers and Returners, the Stayers did not venture outside of Fort Ann to find that real life experience.

Finding Ways to Traverse the Digital Divide

Having lived their entire lives in Fort Ann, the Stayers have been introduced to new technology at a slower rate than their peers who have spent time outside of the town. In some cases, their technology use has not changed tremendously since high school. Jenni explains how growing up, she had to go to a friend's house in order to use the Internet when a school project required online research. Now that she, her husband, and their two children live in the same house in which she grew up, high-speed wireline Internet available to others is still unavailable to them. To upload pictures of her children on Facebook, she has to go to either her parents or her in-laws' house. "You have to plan it out," she explains. "[You] have all these pictures you want to share instantly and you can't." She also highlights the lack of public access to computers and the Internet as difficult in a small town. "It's not like you could ride your bike somewhere and be in a huge library where you had access to all that." The digital divide is a challenge for Jenni and her husband even though they have never lived outside of the town. Faced with this inconvenience, they adapt to overcome the split.

Unlike their classmates who live in more populated areas elsewhere in the country, the Fort Ann Stayers have had to adjust to the different types of access to ICTs which are dependent on where these individuals live in the community. Jenni and Paul may lack wireline Internet, but staying in Fort Ann has not limited their ability to adapt. Each purchased a Blackberry smart phone for email, Facebook, and browsing online. "We get online from our Blackberries. We do everything from our Blackberries,"

explains Jenni. Having access through their phones often leaves them walking around in search of good reception at their house but, as Paul laughs, “I’d rather not have Internet than dial-up.” Using their phones for Internet access is not ideal, but it is better than the alternative.

In fact, Jenni and Paul did not pursue acquisition of wireline access when a line became available on their road. With their Blackberry phones, they did not see the need at the time and instead hope to look into Google TV when their daughters begin to need the Internet more for school. Jenni describes she and her husband as “gadget freaks,” avid users of Facebook and reliant on their Blackberry phones. She has looked into getting an Apple iPad tablet that can get Internet access through mobile phone tower reception. Still, despite their eagerness to try new technology, their adoption remains limited because of their location. “Even here now,” Jenni laughs, “you should see us trying to find a signal, standing in front of the kitchen sink.”

For Vicki, whose job is computer-dependent, her access has improved since leaving home even though she only moved about a half a mile down the road. She has wireline Internet through the regional cable provider in her new home. Through work and personal use, she is “on a computer all day long” and “on the Internet all the time,” describing Facebook as “an addiction.” Having access was not the deciding factor, but was included in her decision when buying a new house with her fiancé.

Limited Focus of Economic Capital

Economic capital is not as much of a draw for the Stayers to remain in Fort Ann as compared to the population in Carr and Kefalas’ study. Vicki explains that she was fortunate to have a graphic design job so close to Fort Ann as those jobs are easier to

come by further from home. She adds that had she not found a job closer, “I might still be here but I would definitely be traveling further to work every day.” On the one hand, Jenni and Paul mention Paul’s job as a factor keeping them in Fort Ann now. “As long as he has that job,” explains Jenni, “I mean, we’re here. We’re definitely here.” Yet the primary reason for the young couple to stay in Fort Ann remains rooted in social capital with their desire to stay close to family.

Although the Stayers’ responses do not focus on economic capital attainment, the actions of the majority follow closely to the traits outlined by Carr and Kefalas in that they prioritize work over school. Paul and Jenni found jobs right out of high school. Venita worked full time while she took classes at the community college, realizing that trying to do both was perhaps too much. “[I] went to college full time for probably a year and a half but obviously it wasn’t working out so well. I kept flunking classes. It was a little too much to work full time and college.” As a result, Venita decided to drop back on her coursework and focus on working full time.

A Diverse Mix of ICT Use

Although the Stayers had to adjust to avoid a complete digital divide, none of those interviewed express a sense of lacking when it came to their access to ICTs. According to Paul, “technology has come so far that I think you can really almost get anything you want wherever you are, one way or another.” His wife Jenni shares a similar perspective. “I think it’s a state of mind, at least in a small town, where you have to want to do it.”

While in college at Plattsburgh, New York, David began using email and Facebook to communicate with friends. Now, he no longer uses either of these ICTs as a

primary means of communication. He attributes his shift back to phone communication—including the house phone he still has as a backup to inconsistent mobile reception at his house—with a busy schedule. “At that stage [in college], it was a little bit easier because I wasn’t working the two jobs,” he explains. “So I checked my email more regularly.” Where Facebook helped him to coordinate with friends in college, he now relies on text messaging. “Now, everybody is literally a text away.”

The Stayers represent the only group with members that still have a landline phone in their current residence, although they did not represent the majority. Venita explains her husband’s attachment to their landline phone as connected to his children from a past marriage. Each of their doctors still has the home landline phone as the main contact. Little does he realize that Venita has been making the change to cell phone contact on the records when she takes the children to an appointment. David also has a landline due to bad mobile reception but still cites his cell phone as his primary means of communication. In this sense, the continued use of landline phones does not appear to be driven by a relationship with the technology but rather for practical purposes related to the shifting divide. Venita’s husband, eleven years her senior, was setting up doctors for his children before he had a cell phone. David also has mobile and broadband access but lacks consistency of that access and therefore continues to rely on a landline.

Negotiating Communication Values and Uses

The comparison of values to uses of ICTs does not differ much from that of the other groups. Some of the group members greatly enjoy new ICTs. The Stayers share the same value in face-to-face communication that does not always translate into action. Not unlike the other migration groups, a number of Stayers value face-to-face communication

above other methods. Jenni was the most vocal about the perceived loss of personal contact. Facebook, she explains, “. . . makes everything so impersonal, you know? You’re not picking up the phone calling someone.”

David’s critique includes the type of general technology use and how it is employed. He explains that today’s youth are reliant on video games and other technology. “Anytime we were off school, we were outside playing.” Although he has a Facebook account, David does not consider himself an active user and actually views it disdainfully:

Facebook, Twitter, all that stuff . . . I think there’s some people who over use it that they have to, they have that ego thing that it’s all about me or they think their life is so important that everyone needs to know what they are doing. That I don’t agree with and that’s probably why I don’t follow Facebook.

David views social media as self-promotion and interaction among youth as lacking personal connection and exposure to the outdoors. Still, he relies on his cell phone and text messaging to communicate with people in his own life.

The perception of ICT use for Venita is shaped by observations of her teenaged stepchildren. “With the kids, it’s like, ‘Hello! Anybody there? Do you guys know how to communicate other than typing IDK?’” she explains. “I don’t think it’s a good thing.” She continues on to describe how, seeing her stepchildren play video games online with their friends, she wishes they would just “pick up the phone” or spend time together at their houses and “go outside.” Enjoying time outdoors with friends was something she remembers from high school and comments that “they just don’t do that anymore.”

Venita has “never been a huge email person” yet the face-to-face interaction she values is not her primary means of communication. In fact Facebook, which she mostly accesses through her mobile phone, is the ICT she cannot live without. She explains that it allows her to “just know what’s going on,” and adds “that’s probably the one mode of communication that allows me to keep in touch with just about everybody.” Jenni also explains how, despite the value of face-to-face communication, she still appreciates what ICTs can offer:

I feel like half the people I talk to on Facebook, I would have no relationship with at all if I actually had to pick up the phone and call them . . . You feel like you’re a part of, you know, what’s going on with people without having to be right there. Even with family it’s great. Having people spread out so far. I have family everywhere. It’s nice that they can see my kids grow up . . . Where honestly, if I had to print out pictures and mail them to them, would I do it? I would like to think I would, but probably not.

Facebook and chat messaging on their mobile phones helps to keep Jenni and Paul connected to people outside of Fort Ann and keep the social network they value so much close to home.

For Stayers, what keeps them in Fort Ann and what remains central in their use of ICTs are the social connections they have in Fort Ann. They have adopted new technologies to adapt without any immediacy, and still without much difference than what was experienced by their peers in other migration groups. The Fort Ann Stayers may wish they had more opportunities for human capital attainment, but they are still

happy to stay put and raise their families in a place they have always considered their home.

CHAPTER V

CONCLUSION

Fort Ann recently started a tradition of inviting alumni to give the commencement speech at the high school graduation. The invitee is generally an Achiever, someone who graduated at the top of their class and who has since moved away to explore the world outside the town. Even years after they have graduated, these individuals are brought to center stage to share their experiences and the opportunities that exist beyond Fort Ann.

This new tradition echoes what Carr and Kefalas found in Iowa: rural communities are actors in their own demise. Small towns invest in and provide encouragement to youth who would have the economic, social and human capital to succeed without the community's support, rather than developing those who will stay or return to populate the town. The knowledge gap hypothesis and digital divide theory suggest that more and more, the penalty on rural America is connected to the lack of access to ICTs and the skillful population needed to utilize them.

In their conclusion, Carr and Kefalas offer a brief acknowledgement of the technologies that the knowledge-centered economy now mandates:

Investing in technologies such as DSL and the Internet or improving existing amenities is probably a good idea for all small towns to enhance the quality of life and create a sort of fertilizer for helping local entrepreneurial opportunities grow. But although the creative-class solution is part of the answer, it is not the panacea that so many have hoped it would be. (p. 145)

This case study is an initial effort that seeks to pick up where Carr and Kefalas left off by asking how migration interacts with access to and use of ICTs for young adults in Fort Ann.

The knowledge gap hypothesis and digital divide theory suggest that disparities in access are both a cause and result of inequities of economic, cultural and social capital. Second wave digital divide theory has shifted this discourse slightly by adding the need to also understand use and the individual relationship with ICTs. For the group of young adults interviewed from Fort Ann, this connection to ICTs is not just about the access to and relationship with technology, but, like their migration decisions, it is related to their relationships with the people in their lives.

RQ1 sought to highlight how the pursuit of economic, cultural, and social capital may impact migration decisions. What is evident among the young adults interviewed from Fort Ann is that the same type of capital most valued in deciding where to locate—social—matches that which influences ICT adoption. Differences are not significant among what each group values and uses to communicate but rather in how a new ICT is introduced and why it is adopted. Here the strength of and value in social capital are vivid. The Achievers and Stayers view economic and cultural capital most predominantly, respectively. However, the most sought after and appreciated form of capital is social. The migration patterns and use of ICTs by this group is heavily driven by social factors such as proximity to family and ability to communicate effectively with friends and family. In this vein, the answer to RQ1a, asking the forms of capital most sought, is social among all for groups.

RQ2 addressed how access to and adoption of ICTs may influence the migration of young, educated, rural populations. Among the Fort Ann Achievers as with all the migration groups in this study, it was once again social forces impacting migration and ICT adoption rather than access itself shaping migration. The digital divide, it appears, may be narrowing but this is not simply due to the expansion of wireline broadband to new areas. Access to ICTs is diverse in Fort Ann and the means in which residents use the different technologies shows that individual choice is playing a key role in shaping the divide. The Fort Ann Stayers, the group least likely to have broadband, have found ways to adjust and adapt. Whether moving to a location with wireline access but still walking distance from home, to using mobile devices as the primary way to access the Internet, the Stayers have found ways to stay connected without feeling too far behind, or as first wave digital divide theory suggests, left out completely. In this sense, how various forms of capital are accessed is not just through migration decisions, as addressed in RQ1b, but also through adoption of ICTs.

How the young adults from Fort Ann are introduced to and reasons why they decide to use ICTs share similar underlying characteristics to the social influences that Carr and Kefalas identify as impacting migration. In a community like Fort Ann, where access to wireline and wireless broadband varies throughout town, the difference in social treatment of each migration group does not directly affect their access to ICTs. Rather, it impacts their adoption and use. For instance, the Fort Ann Achievers were the group who most value economic capital in their migration decisions but overall the responses did not connect this value with access to and use of ICTs. Instead, what emerges is a connection between the influence of social capital on migration and on use of ICTs. Achievers

“absorb everyone’s expectations into their sense of self,” and as the interviews in this case study reveal, this factor may also impact migration and play a role in ICT adoption (Carr & Kefalas, p. 31).

The other three migration groups also share a connection between influence of social capital on migration and ICT use. As they lacked the attention of Fort Ann’s social network, the Seekers had to rely on their own initiative to access new technologies. Returners place the same emphasis on connection to family and to the familiar when deciding to move back to Fort Ann as they do in choosing their communication means. Finally, just as the Stayers identified by Carr and Kefalas started working young and were content in their small town, the Fort Ann Stayers remained in their hometown for the same reasons and chose to adapt their communication means rather than move to an unknown place.

Participants in this study also demonstrate a disconnect between the means of communication they value most and their actual communication patterns. The most valued method across all groups was face-to-face but not a single individual mentions that it is something they could not live without. Perhaps it is considered taken for granted or, as Jeremiah expresses, just too impractical. This most important form of communication points again to the value placed on social capital among the young adults from Fort Ann.

Limitations

As with all research methodologies, there are limitations to the case study approach. Most predominant is scalability. This study limits participation based on the

boundaries of geography and graduation year. Findings from this group will have relevance within the case study population but may or may not apply outside the group.

A second limitation is the close connection with interview participants. “An insider perspective,” explains LaSala (2003), “can benefit but also bias . . . research” (p. 16). Since I had known all individuals interviewed during high school, developing a rapport through an initial interview was easy. The insider perspective allowed me to easily gain responses from participants while also relating to the deeper meaning that the subject matter may have for them. However, my close connection to the subject may also have limited by ability to recognize what young adults from Fort Ann might consider familiar or ordinary but is in fact unusual outside of the town. Though assured their responses would be kept confidential, some respondents may have feared their information would be shared to their peers from Fort Ann and therefore hesitated in their answers to the interview questions.

To explore access in the town, information about the supply of wireline and wireless broadband coverage was sought. However, finding accurate data on cable Internet and mobile phone providers for the time period when interview participants were in high school, 1998 to 2004, was problematic. Warren Publishing’s *Television and Cable Factbook* was selected as a source for wireline broadband access based on the recommendation of Whitacre (2010), who observes the shortcomings of the commonly used Federal Communications Commission’s Form 477.² However, dating back at least as far as 1998, Fort Ann has fallen under the franchised area of a cable company in an

² Whitacre observes that the latter is insufficient when looking narrowly at county, city or town level as it depicts broadband service in an entire zip code even if only one subscriber has access.

urbanized area, Glens Falls, New York, that covers numerous metropolitan and non-metropolitan locations in three counties. The *Factbook* did not breakdown its data beyond franchise area. Equal issues were faced seeking reliable historical data on wireless access. As a result, the conceptualization of ICT access during high school was based solely on the recollection of interview participants, which is not always reliable.

Having one company outside of the Fort Ann town limits controlling wireline broadband was a challenge for this study. Nevertheless, it does highlight the lack of competition for wireline broadband that is a common issue in rural areas. The company with complete franchise jurisdiction, a chapter of Time Warner Cable, Inc., continues to be the only cable and wireline broadband provider in Fort Ann and condensed even further in 2007 when jurisdiction was taken over by an affiliate in Albany, New York (National Broadband Map, 2010).

Thanks to the recent unveiling of the National Broadband Map, a project of the National Broadband Plan (NBP), current data on wireline and wireless broadband access is available. As of June 2010, 4.9 percent of Fort Ann's population has access to a DSL connection, significantly lower than the national average of 86.6 percent. The amount with access through cable, 86.5 percent, exceeds the national average of 82.2 percent. Finally wireless reach is 100 percent, which is 3.1 percent above the national average. Competition does exist for wireless broadband with four different companies, ranging in speeds from three 768 Kbps to 6 Mbps (National Broadband Map, 2010). However, even this data has its limitations, centering only on the village rather than the town as a whole of which the data remains incomplete.

Implications and Future Work

Just like the rural town at the heart of Carr and Kefalas' study, young adults from Fort Ann have followed distinct migration paths. As evident from the interview responses highlighted in this case study, the same type of social capital that influences each migratory group in many cases matches the reasons why each group initially uses ICTs. Making the connection of the similarities in capital between migration decisions and ICT use may help to more effectively bring the discourse surrounding rural challenges into the twenty-first century.

For Fort Ann, this will require understanding the priorities of youth who are moving toward adulthood as they relate to social capital. Each individual interviewed points to the close relationships the small population of the town afforded them to describe what it was like to grow up in Fort Ann. Carr and Kefalas would recognize this social support as the primary form of capital that impacts migration; it is what encourages the Achievers to move away and siphons the attention and resources from the young adults who stay. Social capital is also what appears to impact ICT use. In this sense, the digital divide will not be narrowed for Fort Ann unless the influence of social capital is fully recognized.

If similar conclusions are drawn on a broader scale, these findings could have immediate implications to current efforts to connect rural America. The goals laid out by the National Broadband Plan focus on economic and human capital to include both wireless and wireline broadband access. However, interviews with young adults from Fort Ann reveal that there is more at play.

ICT access may not keep rural young adults at home: Interview participants in this study were asked how they communicate with people and which type of communication they could they not live without. Overall, responses were not focused on broadband but mobile phones, whether or not the phone had Internet access. Even though the young adults who have left may have more ways to connect with people—from wireline to wireless—their use does not differ significantly from those who have stayed or returned

Access does not always equate to use: The Fort Ann Achievers, Seekers and Returners all gained broadband access when they left yet only four out of 15 favor a communication means that relied on an Internet connection—email for Scott, Facebook for Janelle, and Emily and Jamie their smart phone. The remainder mostly selects their mobile phone that they use for calling and texting, whether or not they currently have access to wireline broadband. This supports the perspective of second way digital divide theory to include individual relationships with ICTs to determine use and not simply access. As currently outlined, the NBP does not have as much focus on these relationships.

Social capital must be included in the discussion surrounding the expansion of broadband: As Carr and Kefalas uncovered, how the social network surrounding rural youth operates has a direct impact on their decision to stay, leave, or return to their hometown. This study suggests that the same type of connections impact the introduction to and use of ICTs.

The NBP launched through the Recovery Act of 2009 is an ambitious initiative to narrow the digital divide. When taken in the context of understanding migration decision-

making, ICT access can play a key role in improving the lives of rural Americans. Future research could mirror Carr and Kefalas' study by focusing exclusively on the social relationships that support ICT use among rural, young adults. In addition, the predominance of mobile phone use points to a possible shift from wireline to wireless in broadband use that is worth further exploration as it could influence the type of access that initiatives such as the National Broadband Plan elect to focus their investment.

This case study is one small step to better understand the migration of young adults from rural America in the digital age. Considerations surrounding the digital divide create an image of rural desperation, where people are being left behind and voices left unheard. However, as evident from these individual stories, young adults who have stayed in rural communities are not that far behind their peers who have left for the bright lights of big cities. It is uncertain the economic and educational impact the expansion of ICTs will have on the remote corners of the country. Still, it is clear that for young adults from Fort Ann, social capital remains a central factor in their migration and communication decisions. They are part of an ever-changing world in which they consistently adapt, adopt, and adjust in order to stay connected.

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APPENDIX A

INTERVIEW GUIDE FOR ACHIEVERS

Topic: Migration Decision**1. Description of Hometown / Past Experience**

Can you tell me about Fort Ann?

What was it like for you to grow up there?

Can you tell me about your experience in school? [Probe: after school activities, jobs]

Do you feel that you were well-prepared for your next step after graduating high school?

[Probe: If no: How could you have been better prepared?

If yes: What do you think helped to prepare you?]

2. Migration Experience

For what reasons did you decide to leave your hometown?

Can you tell me about your goals? As you think about your future, what is important to you?

What, if anything, about leaving your hometown made it easier to **[achieve these goals]**?

Can you describe how your life has changed since you left Fort Ann?

Do you ever see yourself returning to Fort Ann?

Topic: Relationship with ICTs**1. Access**

Walk me through a typical day and how you communicate with other people.

[Probe: How do you communicate with your friends and family? How do you communicate with others through your work or school?]

How often, if at all, do you access the communication technologies you use on a daily basis when you are back in Fort Ann? What are some reasons for that?

Where do you go if you need **[missing technology]** when you are home?

In your opinion, what are some of the most important changes in the lives of people in how we communicate with others? Why are these changes important?
[Probe: If answer is work based, ask about social and vice versa.]

2. Use

How would you describe your comfort with new technologies?

What, if any, means of communication can you not live without? Why?

What kind of technological and communication skills do you think are important? What are some reasons for that?

Many people our age are technology dependent through Facebook, email, cell phones. Would not having any of these things prevent you from returning to live in your hometown?

Conclusion

Is there anything more that you would like to add?

Are there any questions that you have for me?

APPENDIX B

INTERVIEW GUIDE FOR SEEKERS AND RETURNERS

Topic: Migration Decision**1. Description of Hometown / Past Experience**

Can you tell me about Fort Ann?

What was it like for you to grow up there?

Can you tell me about your experiences in school? [Probe: after school activities, jobs]

Do you feel that you were well prepared for your next step after graduating high school?

[Probe: If no: How could you have been better prepared?

If yes: What do you think helped to prepare you?]

2. Migration Experience

When did you first leave your hometown? For what reasons did you decide to leave?

Can you tell me about your goals? As you think about your future, what is important to you?

What, if anything, about leaving your hometown has made it easier to [**achieve these goals**]? More difficult?

Can you describe how your life changed when you left Fort Ann? What is it like now that you have returned?

Why did you decide to return to Fort Ann? Do you ever see yourself leaving again?

Topic: Relationship with ICTs**1. Access**

Walk me through a typical day and how you communicate with other people.

[Probe: How do you communicate with your friends and family? How do you communicate with others through your work or school?]

How different, if at all, was your access to the technologies you just explained in your daily life different when you were not living in Fort Ann? What are some reasons for that?

Where do you go if you need **[missing technology]**?

In your opinion, what are some of the most important changes in the lives of people our age in how we communicate with others? Why are these changes important?

[Probe: If answer is work based, ask about social and vice versa.]

2. Use

How would you describe your comfort with new technologies?

What, if any, means of communication can you not live without? Why?

What kind of technological and communication skills do you think are important? What are some reasons for that?

Many people our age are technology dependent through Facebook, email, cell phones, etc. Would not having any of these things prevent you from continuing to live in your hometown?

Conclusion

Is there anything more that you would like to add?

Are there any questions that you have for me?

APPENDIX C

INTERVIEW GUIDE FOR STAYERS

Topic: Migration Decision**1. Description of Hometown / Past Experience**

Can you tell me about Fort Ann?

What was it like for you to grow up there?

Can you tell me about your experiences in school? [Probe: after school activities, jobs]

Do you feel that you were well prepared for your next step after graduating high school?
[Probe: If no: How could you have been better prepared?

If yes: What do you think helped to prepare you?]

2. Migration Experience

For what reasons did you decide to stay in your hometown?

Can you tell me about your goals? As you think about your future, what is important to you?

What, if anything, about staying in your hometown has made it easier to **[achieve these goals]**? More difficult?

Can you describe how your life has changed by staying in Fort Ann?

Do you ever see yourself leaving Fort Ann?

Topic: Relationship with ICTs**1. Access**

Walk me through a typical day and how you communicate with other people.
[Probe: How do you communicate with your friends and family? How do you communicate with others through your work or school?]

Where do you go if you need **[missing technology]**?

What technologies, if any, do you wish you had better access to? What are some reasons for that?

In your opinion, what are some of the most important changes in the lives of people our age in how we communicate with others? Why are these changes important?
[Probe: If answer is work based, ask about social and vice versa.]

2. Use

How would you describe your comfort with new technologies?

What, if any, means of communication can you not live without? Why?

What kind of technological and communication skills do you think are important? What are some reasons for that?

Many people our age are technology dependent through Facebook, email, cell phones, etc. Would not having any of these things prevent you from continuing to live in your hometown?

Conclusion

Is there anything more that you would like to add?

Are there any questions that you have for me?

APPENDIX D
INTERVIEW QUESTIONNAIRE

Please answer each question as accurately as possible.

1. How old are you? _____
2. What is your gender? Male Female
3. When you were in high school, did you have:
 - a. A computer in the home where you grew up? Yes No

What did you use it for?

- b. Internet access through a computer? Yes No

What type of access (choose all that apply)?

 Dial-up
 Satellite
 High-speed / Broadband through Cable
 Wireless
 Other _____
 Don't know
 - c. Adequate cell phone service (reliable reception) at home?
 Yes No
4. Where you live now, do you have:
 - a. A computer? Yes No

- What do you use it for?

e. Internet access through a computer? Yes No

- What type of access (choose all that apply)?

Dial-up

Satellite

High-speed / Broadband through Cable

Wireless

Other _____

Don't know

f. Adequate cell phone service (reliable reception)?

Yes

No

4. Do you own a cell phone? Yes No

a. If yes, what type (choose all that apply)?

Conventional Flip Phone, no camera

Conventional Flip Phone, with camera

Smart phone (Please specify: _____)

Other _____

Don't know

5. Do you access the Internet using your cell phone?

Yes

No

- What do you use it for?
