

Weaving the Home Web:
A Canadian Case Study of Internet Domestication

by

By Tracy Lee Musing Kennedy

A thesis submitted in conformity with the requirements for the degree of
Doctor of Philosophy
Sociology
University of Toronto

© Copyright by Tracy L. M. Kennedy 2011

Abstract

Weaving the Home Web:
A Canadian Case Study of Internet Domestication

Tracy Lee Musing Kennedy

Doctor of Philosophy
Graduate Department of Sociology
University of Toronto

2011

The internet has increasingly become a part of our daily practices, and previous research has pointed to the numerous different ways individuals and groups use and integrate the internet into their lives. Yet, despite the pervasiveness of the internet within the home, few have investigated internet domestication. To grasp the process of internet domestication, my research uses a Social Shaping of Technology approach to investigate how internet domestication develops as a set of contextual practices within households of East York, Ontario.

My research is part of the Connected Lives Project that took place in East York, Ontario between 2004 and 2005. Using a combination of survey data, semi-structured interviews and digital photos, I offer a novel combination of methods not implemented in previous research of the household internet that provides a rich and descriptive illustration of household internet practices. This dissertation research is the first case study of the household internet that offers an in-depth portrayal and interpretation of its domestication. It is an empirical demonstration of the complicated patterns through which the internet is domesticated. My research builds upon previous quantitative and qualitative internet research, and contributes to the clear epistemological gap in what we know about internet

domestication as a dynamic process. How does the domestication of the internet develop as a set of contextual practices?

My investigation draws attention to the kinds of things that shape the everyday - paid work, immigrant status, household structure, and gender roles. Each of these act as threads - different practices - that weave together to shape how the internet is used and integrated as a domestic technology into today's households and families. I characterize the social worlds shaping internet domestication, and discuss how households and families actively shape internet domestication through examining internet communication and information seeking patterns, and address concerns that family is in decline. My research provides new and different ways of thinking about family, family time, and our relationship with the household internet by discussing the time families spend together online, and how family's household spaces are evolving in response to the ubiquitous internet.

Dedication

~ For Eva Weinhandl & Michele O'Connell ~

*Your light leads me,
Your strength supports me,
Your love warms me.*

Acknowledgements

This has been such a long and interesting journey to say the least, and it all started with a single introductory sociology course at Brock University in 1995 – a course that changed my career path entirely in my adult life. A huge thank you to Professor Rebecca Raby for capturing my interest in our social world, and to the numerous professors at Brock for nurturing it. A special thank you to Professor Ann Duffy who mentored me at Brock and provided warm and guiding academic inspiration. A thank you to Professor Nancy Mandell at York University for her keen perception and relentless drive for perfection.

A thank you to Keith Hampton and Dima Dimatrova who offered friendship and support before I even arrived at the University of Toronto Sociology Department. Their presence helped me feel less alone and part of an academic family, and I appreciate that our friendship has continued over the years. A huge thank you to (now retired) Graduate Administrator Jeannette Wright who helped me balance family, work and school. Whenever I was in a bind (and I often was), Jeannette was always there to assist me and keep me together.

What an incredible opportunity it was to be a part of the Connected Lives Project. To conduct such a large research project takes smarts, perseverance and a good sense of humour, and I was lucky to be part of a team that was all of that and more; a thank you to Bernie Hogan, Jeffrey Boase, Kristen Berg, Juan Antonio Carrasco, Rochelle Cote, Jennifer Kayahara, and Inna Romanovska. This was a learning experience that most people can only dream of. A thank you to Phuoc Tran, Julie Amoroso and Natalie Zinko for their assistance throughout the project, and the numerous undergraduates who helped us with our sometimes mundane tasks. A special thank you to Professor Barry Wellman who spearheaded the

project and offered continual leadership, support and guidance. Although we are all rather far-flung now, we are still connected.

There are so many individuals outside of academia who have kept in touch and inquired about my dissertation progress, offering support and high-fives to keep plugging along, even when they weren't always totally sure what I was talking about. A thank you to them for this.

My dissertation committee has been so incredibly patient and helpful throughout this process. A thank you to Professor Barry Wellman, Professor Sandy Welsh and Professor Shyon Baumann who were always so positive and supportive in our meetings together. They allowed me to grow as an academic, offering advice and sensibility along the way when I strayed. I cannot stress enough how wonderful it was to work with each of you. Thank you to Professor Zaheer Baber and Professor Melissa Milkie for their helpful commentary and suggestions.

I would also like to thank Professor Janet Salaff who hired me as a research assistant when I arrived at the University, sharing her keen qualitative skills and knowledge of our social world. Sadly, Professor Salaff passed away November 10th, 2010. Professor Salaff provided continual support of my dissertation research and valuable suggestions for my investigation and analysis. I cherish the time we spent together, and I miss her exuberance and energy.

Although I have already mentioned him twice, I have to again thank my dissertation supervisor Professor Barry Wellman: the invaluable insight, support and guidance over the years, and the incredible academic opportunities you gave to me, I thank you. I learned so much during my time at NetLab and flourished. You are truly a mentor.

A special thank you to my dearest friend Kristen Berg. Who knew how this would all end up when we sat in Prof. Wellman's technology and sociology course eons ago? We spent countless hours on telephone over the years kvetching about graduate school perils and life's adventures. I treasure the warmth and security of our sisterhood, and I thank you for our friendship.

I am also lucky to have people that have stood by me and encouraged me throughout the years. A thank you to David Reaker who always seemed to understand when I had to be glued to the computer to work, and always asked about my daily progress. I really appreciate your support, and the coffee, snacks and dinner you often brought me when I wouldn't pull myself away.

To my son, Tyler Kennedy Collins, I thank you for your comedic relief over the years: the fun demotivational notes and images left on my computer desk¹, and the offhanded remarks about my dissertation kept the mood light when things were too serious. Most of all, I thank you for your understanding when I spent countless hours at my desk, and sometimes even forgot to make dinner (or burned it). I imagine it was sometimes difficult having a parent so academically focused, but hopefully the trade-off was worth it, and I thank you for your patience. This dissertation is partially our story, how you and I tamed the beast together.

To my mother, Michele O'Connell, you are my rock. You were unyielding in your drive to convince me that what I was doing was something extraordinary, and that I could in fact do it (and anything else I set my mind to do). Whenever I was at a low, you were always there to pull me up. I cannot thank you enough for all of your encouragement and support over the years.

¹ An example of one of my son's demotivational note - "Caution: this thesis is very boring".

A Dissertation Haiku²

Domestication -
Net use is socially shaped,
Context gives meaning.

² “The content of a haiku is typically, but not always, focused on what the writer witnesses in everyday life that is more outstanding or important than normal, something deemed worth reaching for in written expression.”
<http://bit.ly/jHy7oQ> Inspired by the Blog: <http://dissertationhaiku.wordpress.com/> .

Table of Contents

<u>Chapter One: Introduction</u>	1
Introduction	1
Deterministic Theories of Technology	2
<i>Technological Determinism</i>	3
Social Theories of Technology	3
<i>Social Construction of Technology (SCOT)</i>	3
<i>Social Shaping of Technology (SST)</i>	4
The Domestication of Household Media & Technologies	5
<i>The Domestication Model</i>	6
<i>The Domestication Model & the Household Internet</i>	8
<i>Gender & the Domestication Model</i>	9
The Social Shaping of Internet Domestication	11
Demographic Differences in Household Internet Use & Integration	14
<i>Race & Ethnicity</i>	14
<i>Immigrant Status</i>	15
<i>Gender</i>	16
Household Composition and Internet Use & Integration	18
<i>Changes in Households & Families</i>	20
Implications of Internet Use & Integration on Families	22
<i>Blurring Boundaries between Public & Private</i>	22
<i>Reconfiguring Households & Families</i>	25
<i>Location of the Home Internet</i>	25
<i>Social Concerns about Households & Family</i>	26
<i>Time Constraints & ICTs</i>	27
<i>Families & the Internet</i>	29
<i>Solitary Place or Social Space?</i>	32
Summary	34
Contributions	36
<i>Methodological Contribution</i>	36
<i>Theoretical Contribution</i>	37
Overview of Dissertation	39
<u>Chapter Two: Research Methodology & Data Collection</u>	41
Introduction: The Connected Lives Project	41
<i>East York, Ontario: A Community Case Study</i>	42
Research Design	43
<i>Quantitative Methods – Surveys</i>	43
<i>Sampling Frame & Data Collection</i>	46
<i>Qualitative Methods - Interviews</i>	48
<i>Digital Photos</i>	52
East York: Community & Participant Profiles	52
<i>Survey Respondents and Interview Participants in East York</i>	53
Household Composition	55
<i>Partnered Parents: Partnered couples with children living at home</i>	57

<i>Partnered Couples: Partnered couples without children living at home</i>	57
<i>Single Parents: Non-partnered adult(s) with children living at home</i>	57
<i>Single Adults: Non-partnered adult(s) without children</i>	58
<i>Living Alone</i>	59
Home-Workers	59
Immigrant Status	63
Data Analysis	65
<i>Survey Data</i>	65
<i>Limitations of Quantitative Component</i>	67
<i>Interview Transcripts</i>	67
<i>Coding the Interviews</i>	68
<i>Intercoder Reliability</i>	69
<i>Field Notes</i>	70
<i>Digital Photos</i>	71
<i>Limitations of Qualitative Component</i>	71
<i>Temporal Contextualization</i>	72
Summary	73
Contributions	74
<u>Chapter Three: The Household Internet</u>	76
Introduction	76
Individual Internet Use	77
Household Internet Use	77
Survey Results & Findings	80
<i>Multiple Computers</i>	80
<i>Location of Home Internet</i>	82
<i>Internet Connection Speed</i>	82
<i>Years Online</i>	82
<i>Hours Spent Online from Home</i>	83
Reasons for acquiring the Home internet	86
<i>Paid Work</i>	88
<i>Communication</i>	88
Discussion: Immigrants & the Transgression of Geographical Boundaries	89
<i>Bridging Physical Distances</i>	89
<i>Transnational Communication Needs</i>	90
Discussion: Home-Workers & Permeable Boundaries	92
<i>Spatial Buffers</i>	93
<i>Spatial Conflicts</i>	95
<i>Contested Boundaries between Work & Home</i>	97
<i>Work & Family Convergences</i>	98
Discussion: Household Dynamics & Internet Use	99
<i>Tensions, Conflicts & Competition</i>	100
<i>Mediating Conflict - Scheduling</i>	101
<i>Mediating Conflict - Multiple Internet Access Points</i>	103
Summary	105
Contributions	107

<u>Chapter Four: Communication: Connected Families</u>	110
Introduction	110
Internet Communication	111
Household Communication Tools – Landlines, Internet and Cell Phones	113
<i>Landlines</i>	113
<i>Cell Phones</i>	114
<i>Internet</i>	116
Survey Results & Findings	118
<i>Hours Spent Communicating Online from Home</i>	118
<i>Emailing from Home</i>	121
<i>Sentiments about Email Communication</i>	124
Discussion: Communication Complexities	124
<i>Benefits of Email</i>	125
<i>The Challenge of Being Always-On</i>	126
Discussion: Different Communication Choices	128
<i>Enhancing Textual Communication with Audio & Visual</i>	129
<i>Asynchronous & Synchronous Instant Messaging</i>	130
Discussion: Household Complexities	132
<i>Instrumental Communication</i>	133
<i>Connecting between the Cracks & Crevices of the Day</i>	134
<i>Email as To-do List</i>	135
<i>Situational Communication</i>	136
<i>Media Multiplexity</i>	137
<i>Creative Communication</i>	138
Summary	139
Contributions	141
<u>Chapter Five: Information Seeking: Road Trips from Home</u>	144
Introduction	144
Information Seeking Online	145
Information Divide	146
<i>Search Topics</i>	147
<i>Situated Searching</i>	148
Survey Finds & Results	150
<i>Online Information Searches from Home</i>	150
<i>Hours Spent Online Looking for Information</i>	151
<i>What are people looking for?</i>	155
Discussion: Putting Information to Use	157
<i>Using Information to feel Connected</i>	157
<i>Information is Social</i>	159
<i>Heritage & Genealogy</i>	160
Discussion: Road trips from home	161
<i>Domestic Information</i>	162
<i>Information for Parents</i>	163
<i>Gendering Information Seeking from Home</i>	164

<i>Dr. Spock goes Digital</i>	166
<i>Knowledge Shifts</i>	167
Summary	169
Contributions	170
<u>Chapter Six: Showing & Sharing -Webbing Together</u>	173
Introduction	173
Concerns about the Modern Family	174
<i>Temporal Lifestyle Changes</i>	175
<i>Deterministic Effects of the Internet</i>	176
<i>Legitimizing the Virtual</i>	178
Survey Results & Findings	179
<i>Face Time with Families</i>	179
<i>Spending Time with Children</i>	182
<i>Gendered Digital Parenting Practices</i>	184
<i>Sentiments about Internet Use</i>	185
Discussion: Webbing Together	188
<i>Shared Screen Time</i>	189
<i>Showing & Sharing</i>	192
<i>Digital Parenting</i>	194
Discussion: Recreating Household Spaces	196
<i>Household Mechanics</i>	197
<i>Social Spaces in the Home</i>	202
<i>Reconfiguring (Internet) Living Spaces</i>	205
Summary & Contributions	208
<u>Chapter Seven: Domesticating the Internet- How the Internet was won</u>	211
Introduction	211
Methodological Contributions	215
Theoretical Contributions	217
Understanding our Social World	218
Home-Workers: Contested Boundaries	220
Canadian Immigrants: Transnational Experiences	223
Household Structure: Networked Families	225
The Domestic Division of Digital Labour	227
Domestic Internets: Households without Borders	230
Future Considerations	232
Closing Thoughts: From <i>The Jetsons</i> to <i>The Netsons</i>	237
References	241

List of Tables

- Table 2.1: Home Internet Households in East York
Table 2.2: Home Workers in East York
Table 2.3: Canadian Born & Immigrant Respondents in East York
Table 3.1: The Household Internet in East York
Table 3.2: Hours Per Week Spent Online from East York Home
Table 3.3: Reasons for Adopting Internet in the Home
Table 4.1: Mean number of Hours per week spent communicating by Internet from home
Table 4.2: Mean Number of Emails sent from Home per week
Table 4.3: Email has improved communication with household members
Table 5.1: Mean Number of Hours Per Week Spent Seeking Online Information from Home
Table 5.2: Information Search Occurrences by Gender and Immigrant Status
Table 6.1: Mean number of hours spent with Partner Per week
Table 6.2: Mean Number of Hours Spent with Children Per Week
Table 6.3: Frequency of disagreements about the home Internet

List of Figures

- Figure 2.1: East York, Home Internet
- Figure 6.1: Home Internet in Dining Room
- Figure 6.2: Home Internet in Master Bedroom
- Figure 6.3: Renovating Household Spaces in East York
- Figure 6.4: Home Internet in Living Room
- Figure 6.5: Home Internet in Living Room
- Figure 6.6: Home Internet in Family Room

List of Appendices

- Appendix A: Introductory Information Letter
- Appendix B: Survey Information Letter & Consent Form
- Appendix C: Interview Information Letter & Consent form
- Appendix D: Overview of Digital Photo Participant Sample
- Appendix E: Survey Respondents & Interview Participants - Profile of East York Sample
- Appendix F: Connected Lives Survey
- Appendix G Connected Lives Interview Questions
- Appendix H: Interview Coding Tree
- Appendix I: Log of Digital Photos

Chapter One: Introduction

Introduction

In 1995, I acquired dial-up internet access in my home and in the sixteen years that followed, the internet became incorporated into my home and integrated into my daily routines. The internet became so embedded into my life and daily habits that for me, it became an invisible technology – much like the telephone. I did not think twice about going online for a pork chop recipe rather than a cookbook, or a phone number rather than the yellow pages, or driving directions rather than a paper map. As time went on, the internet became deeply entrenched within my daily routines: how I did my work, how I communicated with my social ties and the kind of leisure activities I participated in encompassed internet use – I domesticated the household internet. In my mind, the internet clearly had an impact on my life but I harnessed the internet; like a cowgirl lassoing wild game in the old west, I used the internet to suit my needs and the needs of my family because of the flexibility the internet offers. My household internet worked for me, and it worked well.

As a single mother to a very tech-savvy boy, I knew that my experiences and needs might not be typical or the same as other home internet users, and I speculated that not everyone was chatting with their children via instant messenger (IM) under the same roof as I was with my son. As such, I became interested in how other households use their home internet, what their experiences are, and what the impact of these practices are within their homes. Moreover, I became very interested in the process of how and why people incorporate the internet into their homes, and what things might characterize this process. For example, my own single parent household means that staying connected with my son when

we are not face to face is imperative; email, IM and text messages became a vital way to touch base, arrange pick-ups from school or friend's houses, or a quick drive to the school to drop off forgotten lunch money. Also, my role as parent shapes the type of information I search for online: peewee hockey schedules, epilepsy, flu symptoms and grade ten trigonometry equations are part of my online inquiries that are framed by my parental role and the needs of my child.

The internet is also used collectively in my home as a shared experience; my son and I often spend time looking at websites of interest together, watching Rock and Heavy Metal bands on *YouTube*, and sharing links of interest by email or IM for us to talk about later. My personal internet experiences within the home showed me that my immediate social world is a complex web of social practices at play, and this contextualizes how and why I use and integrate the internet into my daily routine. My sentiment about harnessing the internet shows a clear position about people and technology: technologies are shaped by the people who use them within the context of their social world. My personal internet experiences within my home and my curiosity (personally and academically) about the social world of the internet lead me to formulate my dissertation research plan around a key research question: *how does the domestication of the internet develop as a set of contextual practices?*

Deterministic Theories of Technology

The relationship between technology and society has been a consistent topic of discussion and analysis within sociology and one that is historically contentious. Of particular interest is the nature of the relationship between technology and society: how this relationship works and flows, and its social ramifications.

Technological Determinism: Technological Determinists conceptualize technology as an autonomous external force that causes social change (Winner 1977). In this framework, technology dictates people's behaviours, leaving little room for agency or active choice in how a technology is used and adapted. This situates the effect of a technology on individuals, cultures and societies as innate, unchanging and predictable, and essentially dictating the actions of people (Winner 1977). Although there are slight variances in deterministic approaches (hard and soft determinism), the relationship between people and technology is still positioned as linear, flowing from technology to people.

Social Theories of Technology

The deterministic viewpoint of the relationship between technology and people has been critiqued extensively among theorists and across various disciplines. In particular, the lack of agency and action that people have in this relationship is problematic and essentialist; it assumes a technology will affect people similarly, ignores people's agency and does not account for any social or cultural contexts. It also places considerable focus on the technology rather than the people who use it and positions technology as a neutral object, ignoring the people who design the technology, and the historical and social context of its invention and design (Bijker, Hughes & Pinch 1987; Bijker & Law 1992).

Social Construction of Technology (SCOT)

In response to technological deterministic tenets, others have argued that individuals play an active role in the relationship between technology and society. From the Social Construction of Technology (SCOT) approach, people are said to actively construct shared

meanings of technology and dynamically use and integrate technology into their lives (Pinch & Bijker 1984; Bijker, Hughes & Pinch 1987). In some ways this focus on an individual's agency and action reflects a social deterministic stance: people's actions shape technology rather than technology shaping people. In this framework, the relationship between people and technology is opposite to technological determinist tenets, but it still represents a linear unidirectional flow between people and technology. While this theory is useful because it points to the importance of human agency and social context, it is also problematic because the technological artifacts themselves are ignored, and there is an extreme emphasis on agency and neglect of social structures at work that can frame use and integration (Klein & Kleinman 2002).

Social Shaping of Technology (SST)

Rather than thinking about technology as separate and external force that affects people, or that people have absolute agency in their technological use, technologies as a socially shaped means thinking about the relationship between people and technologies as non-linear, mutually constitutive, reciprocal, intertwining and dynamic (Mackay & Gillespie 1992; MacKenzie & Wajcman 1999; Rauner et al. 1988). This is not to say that technologies have no influence or effect upon people. On the contrary, technologies certainly do make an impact on how we work and play. However, the impacts vary from person to person, from group to group, as do people's experiences with the technology and ultimately how it becomes incorporated into our lives:

Technologies themselves are understood as 'cultural products', objects' or 'processes', which take on meaning only when experienced subjectively and where

those meanings will vary according to the context in which particular technologies are encountered in everyday life (Henwood 1993: 43).

In contrast to technological deterministic assertions about the effects of technology on society, MacKenzie & Wajcman (1985) argue that technologies are not neutral objects. Instead, technologies are created within political, economic and social processes existing at that time. This in turn, shapes the conception, invention, design, development, and marketing of the technology, and how the object is then used or 'appropriated' by individuals within these social constructions (Mackay & Gillespie 1992). In other words, technologies and people's actions jointly shape technological integration within various social contexts (Williams & Edge 1996). This approach offers a better understanding of the relationship between people and technology because it recognizes the importance and complexity of various social processes shaping technological use and integration.

The Domestication of Household Media & Technologies

TD, SCOT and SST are meta-theories about people's relationship with technologies, and SST advocates a sensible approach because it recognizes a reciprocal relationship between people and the technologies they use, rather than a linear flow (in either direction). But what does this mean when we look at technological integration in different and more focused contexts, such as the workplace or at home? Even in the home, specific contexts of technological use are different, from domestic appliances (washer and dryer) to leisure and entertainment media (radio and television).

More specific to my dissertation and stemming from a social shaping perspective is a domestication approach found in media and cultural studies research of household media

(Hammill 2000; Harper 2000; Cummings & Kraut 2001). Domestication of technology is conceptualized as shaping the use of technology in order to fit the household, which eventually becomes embedded and almost invisible (Rommes 2002). The technology becomes so familiar to those who use it, that it essentially disappears as a ‘technology’ (Anderson 2003) per se, and is conceptualized as a part of everyday life. The domestication of household technologies, such as the television and the landline telephone, have been extensively researched within cultural and media studies. These studies illustrate a learning process where technology and people reciprocally influence each other (Lehtonen 2003).

The Domestication Model

Silverstone, Hirsch & Morley (1992) put forth a framework – a moral economy of the household - to try and articulate the relationship between public worlds, private households and media. Here the relationship between people and technological objects is that of consumer and product/producer. They devised four elements to describe “the process of cultural integration of artifacts from the outside world...” (Stewart 2003: 8). The first is **appropriation** in which the artifact leaves the world of commodity and is owned by an individual or household. This means that the artifact leaves the production line or the store it was purchased in, it comes into the home or private cultural space and is then adapted to the household for consumption (Habib & Cornford 2001). Next is **objectification**, which addresses how the artifact is not only used in the home, but also where the object is placed, how it is arranged and displayed, and how this space is socially shaped by household members for use and consumption. For example, the physical position of televisions in the household, the integration of it into the daily routine and how it is incorporated into private

and domestic lives differs among individuals and households (Morely & Silverstone 1990). **Incorporation** is the third element that looks not only at how the object or artifact might be used, but also how the functions of the given artifact changes or develops as it becomes embedded into daily routines. The fourth element of the domestication model is **conversion**, which goes deeper into how the object or artifact fits into not only the household and family, but also what the connection and relationship is to the outside world. Silverstone & Hirsch (1992) assert that “this approach to the dynamics of technologically mediated consumption (and the consumption of technology)...provides a framework for an understanding of the complex interrelationships of cultures and technologies as they emerge in the practices of institutions and individuals...” (p26). Importantly, the use and meaning of these artifacts change over time and are constantly re-negotiated during the domestication process.

From the domestication perspective media and technologies are social, cultural, political and economic products, reflecting both the symbolic and the material aspects of its character and adaptation (Silverstone & Haddon 1996; Lie & Sorensen 1996; Richardson 2008; Stewart 2007). Despite the differing theoretical approach that focuses on production and consumption, the domestication model is useful in pointing out how the social, cultural, political and economic work together in a domestication process. The domestication of radio, television and landlines might share some commonalities between households, but given the diversity of people and their individual and communal needs, domestication can vary in its meaning, as do the processes of how it becomes domesticated (Anderson 2003; Cumming & Kraut 2001). In other words, the technology will certainly affect the things we do in some capacity, but what we *do* with the technology will vary from person to person and group to group.

The Domestication Model & the Household Internet

The domestication model created by Silverstone et al. (1992) (which is later reworked by Silverstone & Haddon 1996 and Silverstone 2006) has informed some of the existing research regarding households and the internet. Elaine Lally's (2002) research concerning computers in the home also examines the nature of domestic ICTs as material culture. She argues that:

the household is articulated into wider social processes and institutions and therefore cannot be thought of in isolation from the economic, political and cultural structures within which it is embedded, including its involvement in processes of consumption for a large part of its infrastructural maintenance (Lally 2002: 9).

Lally focuses on the computer as an information appliance, examining its objectification, and what it means to "own" computers and how people integrate them into their homes. She considers people's experiences of the computer as a process, as meaning is actively constructed through interactions with various objects, people, and spaces. Lally also notes that some objects, such as the computer, might resist appropriation by certain household members because of the sense of ownership by certain household members. Therefore, there is a reciprocal relationship between human and machine, with actions and experiences influenced by social structures and power relations. Computers are both symbolic and functional and their meaning is located within social and cultural environments (Lally 2002). While this is important to understand when thinking about the development of the domestication process, the social and cultural context of the household needs to be articulated, how this will vary, and how the household itself is shaped by more than simply

material consumerist culture. If in fact the meaning of the machine is an ongoing process contingent on social and cultural factors, then there is a need to articulate how the daily routine of family members – washing dishes, taking out the trash and childcare – helps to shape our internet experiences and helps frame the relationship we have with the home computer.

Gender & the Domestication Model

Within the consumption approach, other researchers examine how people conceptualize a certain technology, how it might be used, but importantly how it might be interpreted. For example, Sonia Livingstone (1992) utilizes a ‘personal construct’ approach that asks “about the relation between the construct systems of husband and wife and the relations between private, personal and the public, shared construct systems” (p115). Livingstone (1992) offers an interpretive approach using personal accounts of how husbands and wives utilize domestic technologies and analyzes these uses via gender and family dynamics as legitimate categories for investigation (Berg 1994). She discusses gender differences in such areas as necessity, where women note the importance of domestic technologies in their lives more so than men do. Domestic technologies help women with their daily routines, such as chores and childcare.

Lally and Livingstone’s approach to studying how technology becomes domesticated is detailed and useful when examining the household internet. For example, Livingstone identifies the importance of spousal roles and parental roles that women and men have within the context of the household, and how this might frame how technology is interpreted and consumed. However, there are some gaps in the discussions concerning media and

technologies within the home. For example, it is often not expressed how these ‘gendered’ roles came to be, or how they might be negotiated or re-negotiated (or perpetuated) within the household. The domestic responsibilities seem to be taken for granted in the domestication approach, as is the traditional nuclear family framework of husband and wife. There is little mention of different kinds of household compositions: couples that may not be married, couples without children, gay and lesbian couples or single family homes or extended families, which may reshape, challenge or support the construction of gender and gendered roles within the household.

In cultural studies, previous analyses of household media have examined some of the social practices at play in domestication. In particular, household media research often compares and contrasts how women and men use home media by examining gender differences. For example, research shows that men and women have different television viewing patterns and this because men and women have different experiences of leisure and relaxation within the home (Morely 1987; Frissen 1992). For men, home is a haven or retreat from the paid workday, but for women the home is an unpaid workplace with domestic responsibilities (a double day for many partnered women). Because the home represents something different to women and men, and because their role in the household differs, women and men use and integrate television differently – and they use them in different ways that often reflect gendered divisions of labour in the home.

Landline telephone use also reveals gender differences: women not only use the telephone more often than men, they also use the telephone to enhance and complement their social relationships, whereas men are more task orientated and use it more instrumentally (Brandon 1980; Lacohee & Anderson, 2000; Walker 1994). Several studies support the

differences in use and adoption of the telephone between women and men, showing how gender practices shape how people use and integrate household communication tools (Silverstone & Hirsch 1992; Moyal 1992; Lohan 1997). Landline domestication also shows how gender practices can create unintended, different or new uses of home technologies, lending credence to the social shaping approach. For example, the landline was not intended for what is now used for; women in the home shaped landline use and integration within the framework of their gendered roles in the household, and it became an empowering connection tool for women who felt isolated within the confines of domesticity (Rakow 1988; 2002). This ‘unintended’ integration of the landline sounds eerily familiar to the development of the internet – a military project of the 1960s intended to transfer communication and information securely (Leiner et al. 2003) that evolved into something much more personal (Wellman 2004). The development, evolution and integration of the household television and landline provide compelling support of a domestication process that is actively shaped by its users, and raises questions about the domestication of the internet as potentially gendered as well.

The Social Shaping of Internet Domestication

There is a good deal of research about domestic appliances and media, but very little about the household internet and its place or role in today’s households and families. This is very surprising, as most recent statistics from Statistics Canada (2009) show that 96% of Canadians over the age of 16 went online from home in 2009 (up from 51% in 2002), and three-quarters go online every day from home (Statistics Canada 2009). Although there are numerous reports about household internet use and integration, there is very little contextual

exploration and analysis beyond these descriptive reports. How does the internet become domesticated? How do different practices within our social world work together to shape a domestication process? Individuals have some agency in terms of how the internet is interpreted and adapted into their daily routines, but additional demands outside the household such as employment or education also influence and shape the domestication process. The domestication of technology involves various phases of adaptation and a multiplicity of ways that this can take place (Lehtonen 2003).

Internet domestication research is scarce. Previous research focuses on assorted digital divides in rural and remote Canadian locations (Morris 2009; Sawada et al. 2006; Thomson-James 1999), or connectivity in neighbourhoods and communities (Clement et al. 2004; Clement, Moll & Shade 2000; Viseu et al. 2006). Beyond reports from Statistics Canada, and statistical analysis of these data (Middleton & Leith 2007; Middleton & Ellison 2006; Middleton & Sorensen 2005; Sciadas 2002), two Canadian scholars have examined the household internet with some qualitative depth. Keith Hampton's (2001) dissertation research about "Netville"— offered a novel look into new Canadian homes built with internet access, and the role the internet played in the community and within the home. Maria Bakardjieva's (2001) research documented the entry of the internet into people's homes using the standpoint of the user (Smith 1987) to uncover what makes the internet important to people. Although both projects took place in the very early years of household internet adoption, their analysis supports the importance of the home as a site of internet study, and shows the varied internet experiences that take place within it.

Some research about the home internet conducted outside of Canada and the United States point to the importance of context in home internet studies. For example Hack (2007)

explores the role that religion plays in internet domestication by examining ultra-Orthodox (Haredi) Jewish Households in London, England. He argues that religious domestication of the Internet depends not only on family beliefs and practices, but also on the influence of friends and neighbours in the ultra-Orthodox community. Moreover, Ward's (2005) research in Ireland argues: "[T]he introduction of new media forms such as the Internet – rather than emerging and functioning in isolation – are constructed within an existing media and domestic context" (2005: 107).

My research seeks to understand the pervasiveness of the household internet and the practices that contribute to its commonness. Using a SST approach, I investigate how the domestic internet is socially shaped by households and families and their social world. This means identifying and thinking about the role social practices play in shaping patterns of use and integration, which are contextualized by one's social world. Although there are choices in how technologies are integrated, some of these choices are not necessarily conscious choices (Williams & Edge 1996), and instead are actions that are framed within the context and location they occur – the home. As such, I argue that attention needs to be paid to this social reality in order to understand the domestication process: *what kinds of social practices shape domestication of the household internet?*

Drawing upon individual and household internet use studies from outside of Canada, the following three sections in this chapter discuss and problematize this research and posit further queries about the kinds of practices that shape the domestication of the internet, such as demographic differences, and household composition. I will consider the implications of household internet use and integration by looking at the convergence of public and private spaces, reconfiguring household spaces and social concerns about today's families.

Demographic Differences in Household Internet Use & Integration

Individual internet use grew considerably in the late 1990s to early 2000s, as did researchers documenting internet use (Cumming & Kraut 2001; Habib & Cornford 2001; Bakardjieva & Smith 2001; Dryburgh 2001; Haythornewaite & Kazmer 2002). Patterns of use amongst the population emerged showing some disparities in access and differences in use across gender, race and socio-economic status. It became clear that no monolithic internet exists; internet use varied depending on the person and their social location (Nie, Hillygus & Erbring 2002).

Race & Ethnicity

Hack's (2007) domestication research, which is framed by religious practices, points to some social aspects of internet domestication, and additional research indicates further aspects, such as race and ethnicity. In Canada, the First Nations population face numerous barriers to internet access including the lack of household internet access at broadband speed (O'Donnell et al. 2010; Singh 2004), reflecting clear disparities in access to the information economy (Bredin 2001; Ramirez 2000; Ramirez et al. 2003; Mignone & Henley 2009). In British Columbia, initiatives continue to ensure broadband access in First Nation Communities (Hui 2010). However, many Aboriginals continue to face these barriers and as such, remain at a disadvantage and lagging behind in terms of skill and ICT know-how.

African-Americans in the United States differ in their general online activities from European Americans by utilizing the internet for practical information pertinent to their lives, such as employment, religion, and spirituality (Jackson et al. 2001b; Spooner & Rainie 2002; Spink & Cole 2001; Mehra et al. 2004; Appiah 2003; 2004). With the digital divide gap still

remaining for a large portion of African Americans (Smith 2010a), many instead turned to cell phones; African Americans own more cell phones, text most often, and access the internet via their cell phone more often than other racial and ethnic groups (NeilsonWire 2010; Smith 2010b). African Americans made an active choice about the type of ICT they use to go online, but this choice was framed by their social world. In this example, the high cost of a computer or laptop is a clear barrier to going online. As such, African Americans shaped their cell phone use and integration seemingly different from other population groups by using the cell phone as their main point of online access.

Immigrant Status

ICT use amongst immigrant populations also suggest usage patterns that are framed by social needs. Immigrants utilize the internet for job opportunities, maintain faraway ties (Veenhof et al. 2008) and to create new local networks that also offer support and information (Salaff & Greve 2003; Salaff, Greve & Lu 2002; Caidi et al. 2007; Cheong & Poon 2009). Because the internet offers low cost long distance communication, the online communication patterns of some immigrant enclaves to their home countries show pockets of transnational activity, revealing the importance of ICTs in maintaining far-away relationships (Fong et al. 2010). The internet also provides a plethora of pertinent information that is either translatable online or in the language of choice. Some have examined the unique needs of immigrant communities, noting that the online information helps with coping skills and social inclusion (Pyati et al. 2008), while for young immigrants, the internet provides valuable resources when dealing with questions of local and international identity (Elias & Lemish 2009).

These varied internet experiences and differences in use suggest how varying social worlds can paint different pictures of internet integration. As such, immigrant status is a social aspect that should provide an interesting perspective and standpoint of how practices framed by one's country of birth might shape internet domestication: *what role does immigrant status play in domesticating the household internet?*

Gender

Further demographic variances are found between women and men: they use the internet differently and in different amounts largely because of gender roles. It is primarily women who do the communicating (Kennedy et al. 2003; Boneva & Kraut 2002; Rainie 2000), and they tend to use the internet to reinforce existing personal relationships and to cultivate relationships with their family and friends (Rainie 2000). Women are said to be the 'kin-keepers' in relationships (Kennedy, Wellman & Klement 2003), more so than men, which is reflected within how they use the internet primarily for communication with family and friends (Cumming & Kraut 2001). This is also evident in other technologies, such as the manner in which women adopted the telephone (Rakow 1988; 1992; Moyal 1992).

However, these examples of demographic differences do not act alone, nor are they isolated from processes at play, or the institutions they exist within. Some research considers only gender or race or socio-economic status, some combine these but do not consider the location or context of use. Gender differences in particular are tied to scripted behaviours and characteristics, and these gendered performances occur within institutions like household and family. For example, in the home, this gendered behaviour takes the form of women kin-keeping between family, friends and relatives. Even when we look at the kinds of

information that women and men look for online, research shows different – gendered – internet uses that are framed within the household and gender roles within the family. For women, the use of technology in the household is often functional so that work is done more efficiently and quickly (Frissen 1992). Within daily social interaction, “asking spouses to bring milk home” (Hampton & Wellman 1999:6) via an email or text message provides quick and efficient results. Women tend to use the internet to help children with homework (Singh 2001), whereas men are often responsible for managing household finances through the internet (Kennedy, Wellman & Klement 2003). As well, women are twice as likely to seek health information for their children (Shade 2002; 2004), suggesting that women’s role as caregiver is reflected in the kinds of information they seek online. They also seek support from other mothers and offer their own support through email, list serves and instant messaging (Miyata 2002; Bakardjieva & Smith 2001). Households are important social structures that frame our gendered experiences, interactions and relationships within the home: wife and husband, mother and father, parent and child.

These examples imply that women’s internet use is tied to her role of caregiver, and that the internet’s domestication is also shaped by one’s domestic responsibilities. Women do more domestic work than men, which means clear time constraints for internet use: women with children spend less time communicating and searching for information than men do (Kennedy, Wellman & Klement 2003). Domestic labour takes time, and therefore less time is available for those responsible for domestic work (Mattingly & Bianchi 2003; Beshara et al. 2010; Bianchi 2009). Both women and men with children at home spend less time talking on the phone, reading a newspaper, watching television and attending cultural events (Robinson & Godbey 1997). However, De Hann & Huysman (2002) argue “home internet users spend

two hours less on paid work and almost two hours less on childcare and domestic tasks...” (p83), and claim that internet users have more free time than non-users. Other research shows that parents who are internet users spend more time on childcare, less time sleeping, and more time on hobbies (Fu, Wang & Qiu 2002).

Therefore, in order to understand the domestication of the household internet, we need to explore how use and integration - and ultimately domestication - is also tied to gender roles and relations within the family. And, given previous research about gender differences in television and landline use, we should do more than say that internet use is gendered, and instead unravel how these gendered uses exist and are shaped within the household and framed by domesticity: *what role does gender play in domesticating the household internet?*

Household Composition and Internet Use & Integration

In the 1980s the few home computers that existed were used for word processing, telework, bringing work home and children’s games (Venkatesh 1996; Frohlich & Kraut 2002; Lally 2002). In the 1990s computer use changed and adapted to the household, and became more integrated into the home. Over the years, education, family communication, family recreation and travel, shopping and domestic finances became common computer uses (Venkatesh 1996). Therefore, we see not only changing and evolving uses of home computers and the internet (Meszaros 2002), but also how the ‘home’ frames and shapes how it is used, integrated and domesticated.

With the onset of internet connectivity to household computers, and people’s increasing access to the World Wide Web – mostly via dial-up through the landline -

researchers probed internet adoption within the home (Rehem et al. 2003). The home developed into the central hub for internet use (Bakardjieva & Smith 2001), but households with higher incomes, more education, and children showed higher rates of internet use and adoption (Hoffman, Kalsbeek & Novak 1996; Venkatesh 1996), suggesting again that household internet use is varied in different types of households.

The presence of children is an important predictor of home internet use, yet single mothers show lower rates of internet adoption and use than partnered parents do (Bucy 2000; Attewell 2001; Hughes & Hans 2001; Lally 2002). Therefore, while having children at home is a strong predictor of internet adoption, the experiences of married and single women with children differ, and we want to understand why and with what implications. Most of the research looking at household composition and household internet is organized by marital and/or parental status. Even Statistics Canada has limited categories in terms of how they organize Canadian households (Statistics Canada 2006a). For example, household structure is framed by couples (with and without children), one person households, and an ‘other’ category that: “includes multiple-family households, lone-parent family households and non-family households other than one-person households” (Statistics Canada 2006a). However, the ‘other’ category is particularly problematic because it groups together very different types of households – single parents, non-related individuals, and extended families. In this framework, it would be difficult to explore or ascertain the experiences of single parents and compare them to partnered parents. In short, these census categories do not tell a complete story about parents and the internet. It is important to tease out the nuances of these different types of households where possible in order to understand the different circumstances and practices at play in the domestication of the household internet.

Changes in Households & Families

In understanding the domestication of the household internet, and using the home as a research site, it is important to consider the changes that have taken place in Canadian households and families; the 'traditional' North American family has changed considerably over the last 30 years. Where we could once expect to see a household consisting of mom, dad and children, today's household looks much different than it once did. Canadian statistics show that in 1981, married or common law couples with children accounted for 55% of all families, whereas in 2006 there were only 35% of such families (Statistics Canada 2006a). As well, the prevalence of living common-law has increased in Canada. Whereas in 1981 we could expect to see 6% of couples living in a common-law arrangement, this rose to 16% in 2006 (Statistics Canada 2006a).

Changes in people's life cycle have much to do with the changing Canadian household. For example, while Canada's divorce rate has remained constant at approximately 38% over the last few years, the amount of repeat divorces has greatly increased; in 2003, the percentage of divorces involving remarried divorced women rose from 5% in 1973 to 15% (Statistics Canada, 2003; 2006a). Similarly, the divorce rate for previously married men rose from 5% in 1973 to 16% in 2003. As well, the size of the typical Canadian household is declining: single parent households rose from 17% in 1981 to 26% in 2006 (Statistics Canada 2006a).

The number of households with no children is also steadily increasing. Couples with no children living at home accounted for 41% of all families in 2001, up from 38% in 1991 and 34% in 1981 (Statistics Canada 2002). While this change might be partially due to 'empty-nest' households as children leave the home to start their own careers and families, it also

shows that many women are not having children. The decrease in household size is partially related to the decreasing fertility rate in Canada; a rate of 1.53 children for women living in Canada, with a slightly higher rate for immigrant families living in Canada, and for people living in Nunavut. Most recent Statistics Canada reports continue to reflect household changes: in 1986, 49% were married couples with children, compared to 35% in 2006, and the percentage of couples without children increased from 31% in 1986) to 34% (Statistics Canada 2006d).

Part of the change in the size of the household is also related to the fact that people are waiting longer to have children, as they pursue educational interests and establish their careers before starting a family. Nearly one-half of the women in Canada who gave birth in 2003 were age 30 and older (Statistics Canada 2003), and as the life expectancy continues to increase in Canada, more seniors than ever are living on their own or with their spouses. In 2001, 35% of women and 61% of men aged 65 and over lived with a spouse or partner, with 35% of women and 16% of men aged 65 and over living alone (Statistics Canada 2002). However, while household size is decreasing, we also see an increase in the number of seniors living with adult children at approximately 12% in 2001.

The changes in the Canadian households point to the diversity of today's families. With the mounting changes in the composition of Canadian families, it is not surprising that the life-cycle complexities of marriage and divorce, and decisions to have children or not (and how many) would lend itself to a multifarious and evolving household. Today's families are complex and diverse, and as such the domestication process may also vary: *what role does household composition play in domesticating the household internet?*

Implications of Internet Use & Integration on Families

Discussing and analyzing the social practices shaping the domestication of the household internet is important, but the increasing pervasiveness of the household internet reflects wider emerging practices of internet use outside the home, such as the workplace. Increased use of the workplace internet and the ability to work anywhere (in many occupations, not all) also leads to progressively more blurring boundaries between public work place and private home space. Of key concern are the wider socio-cultural implications, such as the outcome of this integration and domestication and what this may mean to families and the relationships within families.

Blurring Boundaries between Public & Private

Paid work takes up a considerable amount of time in people's lives, and much of people's time awake is spent working. In households with couples and children, dual incomes are necessary, yet often hard for parents to balance with childcare responsibilities. More often than we care to admit to, we bring our paid work home; we finish off tasks that we could not finish at the office, or part of our employment involves working from the home office. Either way, work life often creeps into our home life – a quick email or text message to work colleagues between a load of laundry or cutting the lawn shows how public (workplace) and private (household) are converging largely due to pervasive home internet and changes in the workplace and the broader use of ICTs.

In 2000, approximately 1.4 million people in Canada – just over 10% of the population – reported doing some or all of their paid work at home; a 4% increase since 1990 and a 1% increase from 1995 (Statistics Canada 2007a). Many of today's workers can choose

where (and when) they work, primarily because of the benefits that the internet provides – mobility means the opportunity to work stationary from home, and interesting paradox. In 2005, Canadians worked at home occasionally or brought work home from the workplace a mean of 17 hours per week, yet 71% spent less than ten hours per week working from home (Statistics Canada 2007a).

The perceived benefits of the flexibility of working at home via the home internet can persuade workers into pursuing home-work arrangements, allowing them greater control in the organization of their work day (Sullivan & Smithson 2007) without the constraints of office life, such as commuting, rigid time schedules, answering to a manager or even having to get dressed for work, also motivate some office workers to consider home working (Ammons & Markham 2004; Habib & Cornford 1996). Working at home is often included on company lists of ‘family friendly’ policies (Johnson, Andrey & Shaw 2007) so that employees can achieve better work-family balance.

However, organizing the work day can be problematic for home workers. Depending on how many hours they work at home, there are constraints of home life to deal with as well. Although home-working arrangements may be perceived as flexible, some workers, particularly workers who spend most of their time working at home or are self-employed, often work during times that are traditionally spent with family (Baines & Gelder 2003), and may potentially spend less time with them. Paid work can also physically encroach on household spaces. The presence of work equipment such as laptops, cell phones and desks (or dining room tables) piled with paperwork and files can interfere with the flow of domestic spaces and after hour non-work related activities (Kaufman-Scarborough 2006; Johnson, Andrey & Shaw 2007). Auditory intrusions such as ringing business landlines or

buzzing fax machines can have a similar effect (Johnson, Andrey & Shaw 2007). While an independent home-office with a solid door may help eliminate the visual cues of work and provide a distinct work space (Johnson, Andrey & Shaw 2007), accommodating a separate home-office is not always possible and often results in the appropriation of household spaces such as basements, living rooms and bedrooms of children away at university (Ammons & Markham 2004).

Attempts to integrate childcare and domestic work into the paid work day can lead to a breakdown of household routines or efforts to separate home and work (Scarborough 2006). Conflict can ensue if family members are forced to ignore their spouse or parents in the home during work hours (Kurland & Bailey 1999; Salaff 2002) – household life buzzes around the home-worker as they conduct their work on the household internet. Working at home creates permeable boundaries between the home and work spheres (Kurland & Bailey 1999). Many workers must negotiate work arrangements that consider childcare or other household responsibilities (Gajendran & Harrison 2007). For some, working at home for some is seen as an opportunity to integrate household tasks into the workday and the chance to be more available to their children and grandchildren.

Increased scheduling flexibility that is often associated with working at home can ease many of the challenges that women encounter in balancing home and work life (Diamond 2004). However, some women experience significantly higher levels of work-family conflict than their male counterparts (Ahuja 2002), and the notion of balancing paid and unpaid work at home does not challenge nor alleviate the burden of domestic responsibility upon women. Women often remain responsible for domestic work and childcare after they begin working at home (Sullivan & Lewis 2001; Sullivan & Smithson

2007), with some exceptions emerging as more egalitarian divisions of household labour become more common place, and are more actively negotiated between partnered couples (Sullivan & Smithson 2007).

Noting the increase in working at home (whether paid or unpaid extended day), and given that there are both potential benefits and constraints of conducting paid work at home via the internet for individuals and their families, it is wise to consider the role that paid work plays in shaping the domestication of the household internet: *what role does paid work play in domesticating the household internet?*

Reconfiguring Households & Families

As noted, today's families have changed in composition and there are growing concerns about the relationship between the household internet and today's families. Much of the discourse in media and academia posits this relationship as detrimental to family, rather than considering the ways that families might be responding to societal changes by accommodating or reconfiguring the living spaces in their homes, and ultimately the time they spend with family members.

Location of Home Internet

The prevalence of the household internet has called for considerations on where to put the actual technology in the household – home office, living room or bedroom. Early research about personal computers shows that where people put the computer, either in a private home office or a communal space, greatly affects who uses it and when it is used (Frohlich & Kraut 2002; Haddon & Skinner 1991; Aro & Peteri 2003). When the computer is

in a husband's private office space, it deters his spouse and children from using it (Haddon & Skinner 1991). Similarly, if the computer is placed in a parent's or child's bedroom, it is often difficult for other household members to have access to it, especially if they are sleeping (Frohlich & Kraut 2002).

The location of the home internet must also “fit in with cultural and family norms regarding the use of different rooms in the house, its appearance and image must be consistent with the décor of the room and the personality of its users” (Frohlich & Kraut 2002: 6). Decisions on where to put the household internet are framed around how people think about the internet and how they might use it in their homes, and these reasons will vary between households. Little research exists about the location of the household internet or changes in household spaces, and even less discussion concerning the reasons why the household internet is put where it is, and what the implications of these spaces are to family members. In thinking about why people put the household internet where they do, I argue that we should consider not only the social practices (such as the workplace) that frame to decisions about location, but also how household spaces are reconstructed around the household internet, and how household members navigate and organize themselves around the household internet (Ward 2002). From there we can further understand the shaping of internet domestication its implications: *what kind household of practices shape location decisions about the home internet?*

Social Concerns about Households & Family

One of the frequent arguments made about today's households and families is that they are in 'decline'. This sense of a declining or eroding family is formulated around the

amount of time people spend with their family and what they are doing with their time together. For example, Robert Putnam's (2000) famous assertion in *Bowling Alone* noted that people are spending less time with their families and having dinner together less often than they did thirty years ago. Understandably, Putnam's research raised concerns about the modern family. However, since Putnam's book, many have challenged his arguments about families spending less time together. For example, a recent research report from Pew Internet and American Life shows that half of employed adults (51%) find time to have dinner every day with other household members, and 28% do so almost every day (Kennedy et al. 2008).

Time Constraints & ICTs

Others have supported Putnam's work. Arlie Hochschild's (1997) *Time Bind* talks about the increasing tensions between family life and paid work, as the work day continues to increase for women and men. Hochschild (1997) notes how workplace demands lead to a decrease in time spent at home with family and less personal leisure time. When at home, she notes the 'speeding up' of family life, with people resourcefully using the little time they have at home by multitasking or rushing from task to task: time is a scarce resource. People's lives are busy and intricate: more women are in the workforce more than ever and more households have dual-earners and people are working longer work weeks (Fagan 2001; Jacobs & Gerson 2001). With the increased number of dual earning spouses in today's households, families must negotiate work schedules with family time in addition to the schedules of their children, and their own social and leisure activities. People spend slightly fewer hours on paid work, but a slightly higher percentage of their day is spent working, with a noted increase of work hours in the family partial due to women in the labour force. People

are pressed for time, rushed, continually multitasking throughout the day (Robinson & Godbey 1997; Mattingly & Sayer 2006), and with potentially less time with their spouse and/or children (Turcotte 2007; Milkie et al. 2004) and the household internet (Kennedy et al. 2003). As women's days are often structured around domestic labour, they are left with constrained leisure time and more time spent in the home than men (Hochschild 1997; Hochschild & Machung 1989; Stalker 2005).

Looking back on these social concerns about individuals, family, communities and society broadly, there is a longstanding discussion about the decline of family and community and the role that technology plays in this decline. Similar comparisons about the nature of our current social relationships inside and outside the household can be drawn to traditional discussions about community and society. Industrialization is largely responsible for social changes to family, community and society; a Fordist work ethic framed by mass production (made possible by technology) and consumption by individuals. The urbanization of everyday life through industrialization brought about changes to how people live their lives and these changes are inherently perceived as having a negative impact on family, community and society; we care less about our 'kin' and more about ourselves. In some ways, the busy and hectic lives that people currently live in are a manifestation of Weber (1958), Tonnies (1957) and Durkheim (1933)'s individualistic world. But as Durkheim notes, individualism is not necessarily negative, it is productive and needed for the social system to work – a very functionalist standpoint. Social concerns about family, community and society have always been present as have social concerns about technology's role in our culture. The current discussions about people's busy and hectic lives and the reduced amount of time

people spend with family and friends and the role the internet plays in the ‘decline’ of the family parallel these traditional theoretical conversations.

Is the modern family really socially declining? Paid work, domestic chores, volunteer work, socializing and keeping in touch with friends and family are only a few of the many things that keep people busy. When people have children, there are additional tasks that take time, such as taking kids to their hobby, interest or sports groups in addition to weekend outings with family members, or even simply reading a book or watching television – our lives are complex. Therefore, we cannot simply blame the internet for the decrease in the time families spend together or the changes in how they spend that time. We need to include other factors in their social world; changes in household composition, in paid work, and changes in leisure activities to investigate how the internet is shaped within people’s social world.

Families & the Internet

The changes in today’s family can be largely attributed to changes in composition of the family and changes to how people do their paid work. However, some have argued that the internet has further contributed to the family’s social decline. In *No Time: Stress and the Crisis of Modern Life*, Heather Menzies’ (2005) states that people have too much to do and little time to do it in. She asserts that the frenzied schedules of people in today’s society are mediated via cell phones and email, but she argues that these ICTs have in fact contributed to a lack of leisure time, stress, and apathy rather than help free up time and alleviate stress. Here ICTs as a leisurely pursuit may cause depreciation in the quality of time families spend together, especially if individual family members spend their time focusing on a screen

instead of socializing with each another (Nie & Hillygus 2002). Some feel the internet exacerbates the apparent decline in leisure and family time that has been associated with the household demographic and employment changes, and that people trade in-person time with family and friends for time spent connecting to the internet.

Mainstream media outlets have also eagerly circulated ideas regarding the effects of the internet on today's family and households with conflicting depictions of these effects. Some journalists purport that the internet can enhance the time family spends together and how they communicate. The *New York Times* article by Katie Hafner in 2003 "If the kitchen's warm, it may be the PC" is a look into not only at the growing importance of the internet in households, but also how households started to reconfigure living spaces for internet use, and that family members were using the internet together. On the other hand, some journalists argue that the internet can damage family relationships or replace face-to-face time with household members. Peggy Orenstein's (2009) article in the *New York Times* "The Overextended Family" notes that the internet can work to disconnect us further, rather than connect us more – such as video chatting on Skype with her parents. For Peggy, more communication with her parents via video actually diminished the quality of communication between them. Furthermore, a report from USC Annenberg Center for the Digital Future encouraged headlines such as: "Family Time Decreases with Internet Use"³ arguing that internet households spend less face-to-face family time together. Hundreds of online media articles circulated under this premise: "Surging Internet Use Cutting into Family Time"⁴, "Family time eroding in US as internet use soars"⁵, "More time on Facebook, less face time

³ Such as at: <http://bit.ly/iMDRir>

⁴ ABC News: <http://abcn.ws/jlrX7c>

⁵ USA Today: <http://usat.ly/mkPGmR>

for families”⁶ and other variations. A moral panic about how the internet is fragmenting the traditional family – it makes a good news story.

The assertion that the internet has contributed to (or worse, responsible for) the social ‘decline’ of the modern family raises an interesting worldview about the relationship between people and technologies – and our expectations of what family (and their time together) looks like. The belief that technologies cause or influence people to do something shows deterministic thinking. But it is also simplistic to ignore people’s agency in technological use and integration, and one dimensional because it does not consider social contexts. Dichotomous approaches about the effects of the internet on our relationships with others are extreme and mutually exclusive – help or hinder. ICTs may help in some situations, while hinder others – context is key.

Context is often missing from the generalizations made about the internet and ‘the social decline of the family’. We can easily glean the changes in households and families in the last fifty years, but we must not cling to traditional notions of family when examining the implications of these social changes. These arguments about the declining family are measured against ideologies about what a family is, how much time they should spend together, and how they should spend their time when they are together. We can only understand the implications of the social and technological changes by researching the households and families – by asking them. For some people communication via email, text messages or cell phone is too ephemeral and too far removed from “the realities of shared space and time” (Menziés 2005), while others defend the perspective that the internet can be used to sustain intimate relationships with family members when they are away from them (Baym et al. 2004; Wei & Lo 2006; Christensen 2009; Baym 2010). While families may

⁶ PC World: <http://bit.ly/l841BG>

have less leisure time together during the evenings and weekends, they use the internet to keep in touch and conduct family business throughout the day (Veenhof, Wellman, Quell & Hogan 2008). For these people, the internet and cell phones do not replace time spent with family members, instead they supplement the face-to-face absences and help individuals adapt to the current family and household realities of today's hectic world (Licoppe 2004). Here we see that ideas about how families connect and interact have changed in response to social changes, and how they potentially mediate these changes with the household internet.

Solitary Place or Social Space?

The internet is still perceived by most people as a solitary activity that can potentially isolate family members from one another. Some household internet research points to individual asocial activities that can alienate families from one another (Nie & Hillygus 2002). Because discussions surrounding households, families, and the internet are framed around traditional ideas about how families should spend their time together or what appropriate family internet use is, the opportunity to see diversity or variation within households and families is missed, overlooked or worse – assumed unimportant and not legitimated.

Technologies intended (and unintended like the landline) for household use become integrated into the domestic routines, and some of the reasons of how and why they become integrated include the practices I have already discussed (gender roles, household composition, paid work and immigrant status), with questionable implications and significance (help or hinder) in the previous research. Some of the research has already noted how people use email and IM to keep in touch and conduct family business throughout the

day (Veenhof, Wellman, Quell & Hogan 2008), which hints that even though people are busy, family still matters to them, and they use the internet to maintain these close relationships. This is a very different way of staying in touch with family members compared to pre-internet and cell phone days; in the 1950s, there was little daytime connection between family members before the internet and cell phones. Today's families stay in touch and communicate differently than previous generations, yet there is little research that examines social uses of the internet between family members and what might shape these interactions.

Few studies explore how household members might use the internet together as a communal activity. Indeed, Michael Gilbert, a senior fellow at The Annenberg Center for the Digital Future, University of Southern California states: "It's not like television, where you can sit around with your family and watch" (quoted in Ortutay 2009). Gilbert perceives (and likely experiences) the internet mostly one-on-one, but this is not the only kind of experience that families are having with the household internet. For example, Michael Pearson's (2006) article "Family vacation plans take high-tech journey" argues that ICTs can enhance family vacations, and that new websites and programs can now help families plan out their vacations online to create customized itineraries that are suitable to everyone. A family can collectively plan out their vacation online. Couples and parents can look at things of interest to them - very different from a television that provides content for you, the internet allows you to see what you want to see and look for things that interest you and those around - no matter what the content. Pearson's (2006) article suggests that the kinds of information families look for online are framed by their immediate social world - in this example a family vacation. We see in this example that the collective experience of the family online is shaped by household composition, the interests of the family and likely socio-economic

status. Not every family will look at family vacations, as people will have varying interests, and different ways of using and integrating the household internet into their family time together. But what this advocates is the potential for family members to use the household internet collectively, yet there is little research that examines communal internet use and how this fits in with the domestication of the internet. There is little exploration into the creative (and perhaps instrumental) ways that families use the internet together: *how do families domesticate the internet as a shared practice?*

Summary

My dissertation research is a unique case study of internet domestication, stemming from my own interests and home internet experiences. I use a social shaping of technology (SST) approach to investigate the kinds of practices that shape internet domestication. Few studies have examined internet domestication specifically. As such, the background research I discussed in the prior sections draws upon television and landline domestication research (Silverstone, Hirsch & Morley 1992), and identifies different ways individuals and groups use and integrate the internet. I use this work to locate how the internet is used in different ways by different people and groups, which then frame my research questions. For example, African Americans differ in the kind of online information they seek, often focusing on employment and religion (Smith 2010a; 2010b), and immigrants utilize online communication tools to maintain close ties from far away (Ros 2008; Cheong & Poon 2009).

The internet use of women and men suggest not only differing search patterns (Bakeri & Bakar 2011), but also different communication patterns with women interacting most often (Kennedy et al. 2008; Chelsey & Fox 2010). Studies also indicate that households with

higher incomes, more education and children have higher rates of home internet use and adoption (Roser & Peil 2010; Zillien & Hargittai 2009). With increased paid work being brought home or solely conducted at home via the internet, the boundaries between public and private become increasingly blurry and renegotiated (Schieman & Glavin 2008); paid and unpaid work blend together with potential conflict and stress (Myrie & Daly 2009; Glavin et al. 2010). Amid increasing home internet pervasiveness, questions about the location of the home internet surface, depending on family needs (Nansen et al. 2010), and some have responded by reconfiguring their household spaces (Aro & Peteri 2003) with the potential to create new and different ways of spending time together.

Those who have looked at families and internet primarily use surveys to ask about general use, or the qualitative studies focus on only one aspect such as family, gender, immigrant status or religion. In combination, these studies suggest that internet use is not monolithic, and that different aspects of one's social world can shape how we use and integrate the home internet. Therefore, my research questions stem from this previous work:

- How does the domestication of the internet develop as a set of contextual practices?
What kinds of social practices shape domestication of the household internet?
- What role does immigrant status play in domesticating the household internet?
- What role does gender play in domesticating the household internet?
- What role does household composition play in domesticating the household internet?
- What role does paid work play in domesticating the household internet?
- What kind household of practices shape location decisions about the home internet?
- How do families domesticate the internet as a shared practice?

Addressing these questions and weaving the answers together provides a detailed description and interpretation of internet domestication that has not been conducted to date. I expect that each of these different aspects of people's social world will shape internet domestication in dynamic ways.

Contributions

This dissertation research is the first case study of the household internet that offers an in-depth portrayal and interpretation of its domestication. It is an empirical demonstration of the complicated patterns through which the internet is domesticated. My research builds upon previous home internet research, and contributes to the clear epistemological gap in what we know about internet domestication as a dynamic process.

Methodological Contribution

My research addresses an epistemological gap concerning what we know about internet domestication. I address this gap by focusing on a methodological process that triangulates survey data, interviews and digital photos in order to create rich and detailed contextual stories, and thus help in understanding the social shaping of internet domestication. Much of the existing research about the household internet utilizes quantitative survey data in their analysis (Anderson et al. 2001; Anderson 2008; Mesch 2003; 2006) , while others combine surveys and interviews (Hampton 2001). The rich contextual participant experiences in some qualitative studies of home internet (Bakardijeva 2001; Lally 2002; Choudhry 2009; Lim 2008; Lim & Soon 2008) are a particularly compelling way to unravel different social practices at play. As such, my use of survey data, semi-structured

interviews and digital photos offers a novel combination of methods not implemented in previous research of the household internet.

Theoretical Contribution

The Social Shaping of Technology (SST) posits the relationship between people and technology as reciprocal and dynamic instead of linear and static (Mackenzie & Wajcman 1985; Edge 1988; Elliot 1988). People have some choice in the technologies they use and integrate, and these means different and diverse kinds of integration and outcomes, a framework that is particularly appropriate for my research. To grasp the process of internet domestication in Canadian homes, my research uses a Social Shaping of Technology (SST) approach of households in East York, Ontario to investigate how internet domestication develops as a set of contextual practices.

My theoretical contribution to SST theory is twofold; to support the existing theoretical tenets and to enhance the theoretical framework of the SST theory. My research supports the SST theory but instead of examining traditional media and communication technologies (such as the television and landline) found in previous work, I offer a theoretical application of the SST theory to a new and different technology – the internet. This provides a fresh approach and a modern application of the SST theory, which contributes to its framework further by strengthening and reinforcing its tenets.

Despite its pervasiveness, there is little about internet domestication, and my research points to the importance of the home as a locale to investigate in the social shaping process (Morley 2006). Although the SST theory notes the active role people play broadly in the use of technology, it does not address the context of their technological choices (Mackay

& Gillespie 1992). Choices are framed by our social world (Baber 2005), and as such, my research in the context of the home contributes to this theoretical gap by characterizing various aspects of the ‘social’ and the practices it encompasses. I provide a highly detailed case study illustration of the social shaping of internet domestication in diverse households, which will enhance the SST theory.

My research contributes to an understanding about the social practices that shape the internet domestication process by characterizing people’s social worlds. In the previous sections, I discussed several thematic differences that emerged from previous literature with respect to household internet use: gender, immigrant status, paid work, and household composition. Previous research tends to focus on only one or two aspects (such as ethnicity and income) rather than look at different practices working together within the home. Therefore, building upon previous work, my research takes these varying aspects and connects them together. Each of these act as threads – different practices – that weave together and interact to shape how the internet is used and integrated as a domestic technology into today’s households and families. This approach is not found in previous internet domestication research. I reframe the typical query of “how has the household internet has affected everyday life?” to include “how has everyday life affected the household internet? And, what does that ‘everyday’ look like?”

My research draws attention to the kinds of things that shape the everyday – paid work, immigrant status, household members, and gender roles – how these sometimes present problematic (and stereotypical) constructions of our social world, and how these in turn shape internet domestication. I characterize the social worlds shaping the domestication of the household internet, and discuss how families actively shape a domestic internet by

looking at internet communication and the information people search for online. My research provides new and different ways of thinking about family, family time, and our relationship with the household internet by discussing the time families spend together online, and how family's household spaces are evolving. Without a systematic data collection and analyses process, such as my dissertation research, home internet use patterns are muddled and general. We know that the internet is in the home, but a complex investigation that probes how these threads weave together will reveal what is really taking place with the home internet.

Overview of Dissertation

At the introduction of this chapter, I shared a snippet of my personal story of internet domestication. I strongly believe that research should be driven by a keen interest in the topic area and some lived experience of the environment of study (Smith 1997; Rheinharz 1992). Therefore, my research process stems from my personal experience. Each chapter contains my personal story as relevant to the chapter topic with some reflexive commentary - except in chapter two, where I explain my methodological standpoint.

In Chapter Two - *Research Methodology & Data Collection* - I explain the locale of the research site, and the surveys, interviews, and photos that offer contextual stories and scenarios of home ICT use and integration. I also provide a profile of the survey respondents and interview participants - home internet users in East York, Ontario between 2004 and 2005.

Chapter three - *The Household Internet* - is the first chapter of four that explores the role varied contextual practices (paid work, immigrant status and household composition) play in domesticating the internet. I first discuss previous research concerning demographic

predictors of household internet adoption. However, in keeping with my premise that the domestic internet is socially shaped, I move beyond these demographic descriptors and I consider the household internet broadly and discuss the acquisition of the home internet and its place in the home.

Chapter four - *Communication: Connected Families* – examines internet communication and interaction specifically, and exploring how the workplace, immigrant status and household composition shape communication patterns from home, and chapter five - *Information Seeking: Road Trips from Home* - focuses on information seeking online where I investigate information seeking via the internet specifically, and analyze the kind of information sought amongst East York respondents.

Chapter six - *Showing & Sharing: Webbing Together* – specifically investigates the shared use and integration of the household internet. I discuss how the household internet can not only be a solitary practice, but also a collective experience in the home. I consider how families are recreating leisure time in lieu of their busy schedules and how households are reconfiguring what it means to spend time together, and what role this plays in the domestication of the internet.

And finally, chapter seven - *Domesticating the Internet: How the Internet was Won* – is the final chapter of this dissertation that summarizes my analysis and offers a discussion of the key contributions of my research. I address my overarching research question and thread together the various contextual practices that contribute to the social shaping of the domestic internet. I offer some personal insight and critical thoughts about the socio-cultural significance of my dissertation research, and provide further thoughts about the future of the domestic internet.

Chapter 2: Research Methodology & Data Collection

Introduction: The Connected Lives Project

My own experiences of domesticating the internet led to my interest in researching other home internet users. Professor Wellman's initiative to investigate the emerging ubiquity of internet use in East York and the creativity of doctoral students⁷ lead me to a dynamic opportunity to contribute to our understanding of how households shape internet domestication. In this chapter, I will outline the research site of East York, Canada and the methodology used to explore how the different practices of paid work, immigrant status and household composition weave together to shape the home-web. My dissertation research is part of 'The Connected Lives Project', with Professor Barry Wellman heading the research team at NetLab at the University of Toronto. In general, the project employed a focused analysis of how the internet is embedded in various aspects of everyday life, and how different kinds of users (and non-users) of new information and communication technologies (ICTs) engage in social relationships and community. The project, funded by the Social Science and Humanities Research Council, consisted of six graduate students and numerous research assistants in the Greater Toronto Area. Several of the graduate students used this project for their Doctoral dissertations, and everyone contributed to specific sections of the data collection development depending on their research focus. The research team spent countless hours contributing their interests and questions to the construction of the survey. Many more hours were spent condensing our questions into a reasonable draft that would not overburden our respondents. The many meetings created a dynamic survey that was later enhanced by an interview schedule, which also took many meetings and many revisions. The

⁷ Bernie Hogan, Juan Carrasco, Kristen Berg, Jennifer Kayahara, Jeffrey Boase, and Inna Romanovska – referred to from here as 'team members'.

experience of collaborative research design and implementation was immensely rewarding, and provided us with some very rich data for analysis.

East York, Ontario: A Community Case Study

The study took place in the community of East York, a residential area of Toronto (see Figure 2.1). At one time, East York was a distinct self-governing “borough” of Toronto until metropolitan amalgamation in 1998. East York has been studied twice previously by Professor Barry Wellman prior to the internet, and was originally chosen for the first study in 1968 because of its convenient locale (30 minutes drive from the downtown core), atmosphere, cooperative government, and cultural homogeneity (which has since greatly changed). My dissertation approach is a community case study that allows me to gather evidence, describe, and understand how the community operates, and how groups and individuals within the community experience the home internet (Yin 1991; Berg 2001). As such, this methodological approach can incorporate a number of data gathering measures in order to properly portray and interpret internet domestication (Berg 2001).

Figure 2.1: East York, Ontario



Research Design

The research design employs a methodological triangulation including surveys, interviews and in-home observations logged with photographs, providing a rich and detailed understanding (Miller & Slater 2001) that illustrates the social shaping of the domestic internet in Canada. As Berg (1998) states; “by combining several lines of sight, researchers obtain a better, more substantive picture of reality; a richer, more complete array of symbols and theoretical concepts; and a means of verifying many of these elements” (1998: p 5).

Quantitative Methods – Surveys

In November of 2003, the NetLab research team began construction of the survey, and in June 2004 the final survey draft was completed. Each team member pre-tested the survey on someone they knew in order to provide feedback on the structure of the survey and

the wording of the questions. In some situations questions were clarified or simplified or revised substantially. The final 32 page survey (one to two hour completion time) was arranged thematically into the following areas: a) frequency of social interactions b) social network characteristics c) social network management d) civic engagement e) household composition f) social psychology and g) pathways to health information. In these sections, we ask participants about their use of ICTs, their social and family relationships and the composition of their social networks. Once the surveys were completed and collected, the data were cleaned and entered into SPSS (Statistical Package for the Social Sciences) by NetLab research assistants.

The survey is a combination of descriptive and analytical questions. Descriptive surveys are intended to document current conditions or situations and provide information about people's attitudes about a specific topic (Jenson 2002). Similarly, analytical surveys can also collect descriptive data, but questions focus on examining the relationships among variables (Jenson 2002). For example, in the Connected Lives survey respondents were asked descriptive questions such as the nature of their ICTs use, and analytical questions regarding how participants utilize ICTS to maintain feelings of well being (or not) when searching for health information. This approach also allowed Connected Lives researchers to gain a sense of the social effects of ICTs in various facets of the participant's life.⁸

In relation to my dissertation research, the bulk of my household questions are in the first part of the survey (see Appendix F), but there are many questions, such as standard demographic questions (country of birth for immigrant status), and general internet questions

⁸ Ethical approval for this research was submitted to IRB committee at the University of Toronto, and was approved in May of 2004.

that are relevant as well. The following is a thematic overview of the questions pertinent for my analysis:

- *ICTs owned:* Ownership of computer and internet and where media and ICTs are located in the home.
- *Household composition:* including spouses or partners, children and other adults and their demographics.
- *Domestic Chores:* hours spent on cooking, cleaning, childcare and yard by self, partner (if applicable) or others in the home.
- *Time:* hours spent using the internet from home; time of the day internet used; time spent with partner and children (if applicable) on various activities.
- *Internet use:* type of information looked for; who people communicate (email, cell phone, instant messaging, landline) with (inside and outside the household) and how often.
- *Impact of the internet:* affects of the internet on communication, learning and commerce inside and outside the home; feelings about the internet.
- *Working at Home:* occupation; percentage of workday spent working at home; hours worked at home; ICTs used, reasons for working at home.

These questions provided a general overview of how much time people spend on the internet, the kinds of things they are doing online, and what other tasks or responsibilities participants have in their daily routine.

Sampling Frame & Data Collection

Because survey response rates tend to increase with preliminary notification and follow up (Yammarino et al. 1991), the research team created an introductory information letter (see Appendix A) to send to potential participants where we noted our intent to follow up with them in two weeks time. Sampling Methods and Research (SMR) supplied NetLab with a random sample of 1000⁹ adult households with listed telephone numbers and addresses stratified by FSA (Forward Sorting Area – the first three letters of the postal code). However, there were several problems with this list. First, the phone list included locations such as Seniors' residences or Nursing Homes where there were numerous people living but were generally too frail to participate. Second, the provided telephone numbers and addresses did not work for apartments because the apartment numbers were not available, which meant that we could not send mail directly to these selected participants. The research team called the telephone numbers provided to inquire whether the individual was interested in receiving an information letter about the Connected Lives Project, and then we collected their complete address. Some of the telephone numbers provided for the apartment dwellings were no longer in service, and the research team used reverse address look-up¹⁰ to locate and randomly select current phone numbers in the same building to inquire about participation. In June 2004, we mailed out an introductory information letter to 621 English-speaking adult participants over the age of 18 in East York and Leaside about the Connected Lives Project.

In the interest of preventing non-response and a low response rate, the team chose to deliver the surveys in person to potential participants rather than use postal mail (Sarantakos 2005; De Vaus 2002). Between July 2004 and March 2005, the research team hand delivered

⁹ 1,000 was the unit by which the names were sold by the Sampling Firm.

¹⁰ <http://www.canada411.ca/search/address.html>

the surveys door to door, offering a more personal approach and situating us within the research locale.¹¹ Each team member was given a list of names, addresses and phone numbers from the original sample, a name tag indicating their institutional affiliation, and a verbal script that followed up on the initial letter that introduced themselves as members of the NetLab research team. They were also asked to record refusals, no answers at the door, whether the people in the home matched the name we had from the sample¹², and initial comments such as gender, age and ethnicity. In cases where there was no one home, researchers returned to the household to try again.

Once participants agreed to take part in the research and complete the survey, team members provided an additional information letter and consent form (see Appendix B) that introduced the NetLab research team, and described the topic, purpose, and procedures of the study. The consent form included a series of detailed steps that informed participants about the research project. The steps outlined what procedures we took to eliminate any risk against breach of confidentiality. Participants were assured that their identity would not be disclosed in any of documents, articles or presentations, and that only aggregated statistics would be reported. Participants were given time to read through the consent form and they were given the opportunity to ask questions about the research. They were asked to sign the consent form to indicate their willingness to participate in the study, and given a copy of the consent form to keep for their records. Participants were given a five dollar gift certificate from *Tim Horton's* in appreciation of their time and effort.

¹¹ None of the members of the research team lived in East York, but we compiled a demographic overview of the population, noting changes since previous studies by Professor Barry Wellman.

¹² One of the problems with the original sample is that the names of the people in the household often did not match the current residents; some people moved away, while others noted that people had passed away and so forth.

Two weeks after the initial survey drop off, team members returned to the households to pick up the surveys. This process proved more challenging than the initial drop off. In some situations it took more than a month to retrieve the survey, as people were working during the day or away on summer holidays. In some of these situations, team members offered envelopes and postage so that the participant could mail in the survey when they were finished. Despite these hurdles, we obtained a response rate of 56% (n=350). Of these, 69% (n=242) note that they have home internet access, spending at least one hour of internet use at home. Because the intent of my dissertation is to explore the domestication of the internet, my analysis focuses only on these 242 home internet users.

The research team used an online tool that calculates appropriate sample sizes for the given population.¹³ Raosoft determined a sample size of 377 necessary for generalizable results, and our sample of n=350 for the larger survey falls slightly short.¹⁴ My sub-sample of home internet users (n=242) is 69% of the larger sample, and this is comparable to the 68% of the Canadian population using home internet in 2005 (Statistics Canada 2006b). However, my intention is not necessarily to generalize my interpretations and analysis to the general population, but rather to uncover different kinds of practices that can shape internet domestication differently for different people.

Qualitative Methods - Interviews

The interview schedule was developed by the Connected Lives research team between September 2004 and January 2005 (see Appendix G). Team members conducted several pre-tests of the interview guide, and revisions were made based on feedback of the

¹³ <http://www.raosoft.com/samplesize.html>

¹⁴ However, given the large sample size and favourable response rate, I would argue that the survey data provides statistical generalizability.

researcher and the interviewee. As well, because all researchers had her/his own research agenda relative to their dissertations, we arranged a retreat that took place at my home so that we could go through each section of the interview and explain exactly what we wanted or expected from a particular set of questions. We set up a ‘mock interview’ where researchers would ask the interview questions with probes to fellow researchers – who would then answer. In some instances questions were reworded for clarity, but the exercise gave the team a solid understanding of the premise behind each member’s research interests. Based on this, we were able to further enhance and edit the interview guide before we went into the field.

Participants who completed the initial survey were asked if they were interested in a follow-up interview; at the end of the survey, we asked survey participants to check off yes, no or unsure. Of the 350 survey respondents, 40% (n=140) wrote “yes”. My role in the interview process was to oversee and coordinate the interviews, interviewers and respondents. In this role, I assigned respondents to fellow researchers (as well as my own) to contact the survey respondents who noted unsure or yes to an interview by telephone and schedule interview dates. I kept track of the respondents in an Excel database noting scheduled interview times and dates (for safety and as well as rigour) and refusals, in addition to all the interview material that was collected (audio files, field notes, digital photos and so forth) for storage and analyses. I compiled all project material in a secure password protected online database called ‘Basic Support for Cooperative Work’ (BSCW - provided by the Faculty of Information Sciences), which enabled researchers to easily upload their field notes and digital pictures. Later, transcriptions were also uploaded so that each researcher could access the files for his/her own analyses.

In-home semi-structured interviews were conducted between February 2005 and April 2005 with one-quarter of the survey participants (n=87). The interviews were conducted by Connected Lives doctoral students and took between two and four hours to conduct. Participants were already familiar with the types of questions we asked about, having completed the survey. The intention of the interview was to follow-up on survey questions, allowing us a more comprehensive understanding of the initial answers in the questionnaire. These interviews also incorporated a number of open-ended questions that helped explore some issues that we may have overlooked in the survey. In addition to the initial topical areas in the survey, interview questions also asked participants about: a) Social network composition, structure and processes b) Events and planning c) In-home communication environments d) Health information and support and e) Cultural and Ethnic information seeking and support.

The qualitative component of the data collection was particularly relevant and important to my dissertation research because I was interested in the contexts of household internet use, which is beyond the scope of surveys. The first part of the interview guide focused primarily on my research focus, and it took approximately 30 to 45 minutes to complete in the interview. To establish rapport and have the participant gain some feelings of comfort with the interview, we began the interview with an introduction to their household members. We started by asking respondents to talk about who lives in their home, what their work and domestic routines are and how they spend their leisure and social time. This also gave me more insight into the participant's life, which nicely sets the context of household internet use. In the next section we continue to learn more about the respondent by asking

questions about their computer use and how they feel about their computer skills, and the skills of others in the home.

The second section of the interview guide explored the internet in the home, where we ask about the location of the internet, and their thoughts and feelings about having the internet in the home. Next, we ask about personal internet use to include how much time they spend online, times of the day they are online, and any potential interruptions when they are using the internet at home. The questions then focus more specifically on online communication, the ICT used, frequency and feelings about online interactions, and then move to the kind of information they search for online. Shifting from questions based more about the individual, we ask questions that include other household members (if applicable) to broaden the context. Questions concerning scheduling, internet use among household members, and potential conflicts of the household internet were asked, in addition to children's internet use (if applicable) and parental roles. Further questions were asked about internet and family members, and the positive and negative effects of the internet in the home.

With the permission of participants, interviews were recorded on digital recorders that allowed researchers to load audio files directly to a computer. Handwritten notes were taken for those respondents who did not want the interview recorded. Interviews were then transcribed by hired research assistants and imported into NVivo, a qualitative software program for thematic coding and analyses. Interviewers were also asked to write field notes of their interview experiences and a summary of the interview overall. This provided a useful story-book snapshot of the interview data and helped contextualize the social world of the interview participants.

Digital Photos

The third component of the Connected Lives research design included an observation of how people use the internet to search for information online and a digital photo of the location of the home internet (in some cases more than one location).¹⁵

Interviewers asked permission to take a picture using a digital camera of where the computer(s) with internet access was located. Computer pictures provided a visual depiction of not only computer and internet technologies, but also a visual representation of where Canadians are using the internet in their homes and what is going on around them at that time. This exercise is particularly useful in contextualizing the space surrounding the internet, and can show the aesthetics of the area. In total, 58 households (89% of home internet users interviewed) had digital pictures taken of household internet access points¹⁶. Digital Photos were logged and recorded into an Excel database.

East York: Community & Participant Profiles

Over two-thirds (69% n=242) of the survey sample and three-quarters (75% n=65) of the interview sample are home internet users. The following section provides an overview of the survey respondents and interview participants.

¹⁵ Towards the end of the interview, interviewers asked participants to demonstrate how they use the internet in their homes. Interviewers observed how participants search for health information and how they organize their Bookmarks or Favourites. Kristen Berg and Jennifer Kayahara utilized this component of the interview for their own research endeavours. Again, different sections of the interview schedule (such as pathways to health care, network generator, and local culture) reflected the different research interests of several graduate students and were not included in my dissertation analysis.

¹⁶ For an overview of the digital photo participant sample see Appendix D. Distribution across contexts of inquiry are comparable to interview sample.

Survey Respondents and Interview Participants in East York

The East York home internet users sample (n=242) reflects a typical urban Canadian city (see Table 2.1).¹⁷ Fifty-seven percent of the survey respondents are women, with an average age of 42. More than two-thirds (66%) are employed and most are working-class or middle-class with a mean annual household income between \$50,000 to \$75,000.¹⁸ Just over half (51%) of the respondents have a university degree. Reflective of the cultural diversity in East York, just under half (49%) of survey respondents were born outside of Canada. With respect to the Canadian population, the survey sample parallels Canada's demographic profile of home internet users as it represents a slightly higher percentage of women, a higher percentage with a university degree, and higher employment and income rates (Zamaria, Caron & Fletcher 2005). My sample however, has a lower percentage of non-Canadian born participants than is represented in the general Canadian population,¹⁹ but statistics for immigrant internet use at home for this time are not available. The survey sample and the interview sample are similar demographically.²⁰

¹⁷ This sub-sample of home internet users is comparable to the East York Sample n=350. See Appendix E: Survey Respondents & Interview Participants – Profile of East York Sample.

¹⁸ Canadian Currency.

¹⁹ See Statistics Canada: <http://bit.ly/rq7DcH>

²⁰ Percentages are within five percent of each other.

Table 2.1: Home Internet Households in East York

	Partnered Parents		Partnered Couples		Single Parents		Single Adults		Living Alone		Total	
	Survey	Interview	Survey	Interview	Survey	Interview	Survey	Interview	Survey	Interview	Survey	Interview
% Household Structure	41	40	25	25	8	14	8	6	18	15	69	75
<i>n=</i>	98	26	61	16	20	9	19	4	44	10	242	65
% Women	57	58	53	63	80	89	58	25	39	40	55	56
<i>n=</i>	56	15	32	10	16	8	11	1	17	4	132	38
Mean Age *	42	45	47	52	45	45	26	35	45	54	42	47
<i>n=</i>	97	26	60	16	19	8	19	4	44	10	239	65
% Canadian Born	46	54	56	50	55	56	53	50	46	30	50	49
<i>n=</i>	45	14	34	8	11	5	10	2	20	3	120	32
% Employed	66	65	71	69	65	44	53	100	63	40	66	62
<i>n=</i>	61	17	43	11	13	4	10	4	27	4	154	40
% Work at Home	53	67	49	75	46	50	46	50	48	50	32	35
<i>n=</i>	33	12	21	9	6	2	5	2	13	2	78	27
% Undergrad Degree	35	50	42	31	10	50	26	50	30	40	33	39
<i>n=</i>	34	13	25	5	2	2	5	2	13	4	79	25
% Advanced Degree *	21	19	30	50	10	0	5	0	7	10	18	22
<i>n=</i>	20	5	18	8	2	0	1	0	3	1	44	14
Mean Household Income	50000- 75000	50000- 75000	50000- 75000	50000- 75000	50000- 75000	40000- 50000	50000- 75000	50000- 75000	50000- 75000	50000- 75000	50000- 75000	50000- 75000
<i>n=</i>	65	17	43	9	19	8	16	4	32	9	175	47

* $p < .05$

The following section profiles the different frameworks of analysis throughout my dissertation. As I am investigating social practices that shape internet domestication, I include household composition, home-workers and immigrant status.

Household Composition

One of my key frameworks of analysis of internet domestication is the household itself and the people within it, with the premise that the structure of the household helps shape the domestication process – different household members with different needs and experiences. Because each chapter uses household composition to compare and contrast household internet use, the following section discusses the demographic characteristics of these households.

As discussed in the previous chapter, household composition has changed across North America, yet US Census and Statistics Canada use the same constrained household categories of analysis. Therefore, my dissertation examines five types of households and their home internet use in East York. My original categories of household composition consisted of eight types: partnered couples with children living at home, partnered couples without children living at home, single parents, non partnered adults with children, non partnered adults without children, partnered couple with children living at home and other adults, partnered couples without children living at home and other adults, and living alone. Statistics Canada has four household types (Statistics Canada 2006a): couple family households with children, couple family households without children, one-person households and other family household types (includes multiple family households, lone-parent family households, and non-family households other than one-person households). I found that the ‘other’ category is problematic because single

parents are included within it, which does not allow for comparison or contrast between single parents and partnered parents.

US Census Bureau (2006) offers comparable categories to Canada, and is similar to household categories used by Pew Internet & American Life in the United States, a well respected research organization that uses telephone surveys for numerous topics concerning Americans and technology. However, the frequency distribution for my eight initial groups were problematic: three groups had very small numbers: partnered couple with children living at home and other adults (n=4), non partnered adults with children and other adults (n=4), and partnered couples without children living at home and other adults (n=7). These three groups were collapsed into other groups because of the small number of participants (description of the groups follows below). In households with children, only children who actually live in the home are included. That is to say that some respondents, such as partnered adults without children, have children (usually adult) but they do not live in the household.

Therefore, my research focuses on five types of household composition: partnered couples with children living at home, partnered couples without children living at home, non-partnered adult(s) with children living at home, non-partnered adult(s) without children, and those living alone. While the group sizes may have been more robust if the categories were simplified, such as partnered and non-partnered or people with and without children, this would have missed many of the nuances of internet use that is shaped by our world (and people) around us.²¹ Moreover, while two my categories are slightly different from Statistics Canada (I pull single parents from the 'other' household types, and my sample does not have any multi-family

²¹ Of note with respect to same-sex relationships. In the larger survey sample (n=350), seven respondents noted same-sex relationships (three men and four women). In the sub-sample of home internet users (n=242), there are five; three men and two women are in same-sex relationships.

households in it), the distribution of my household types is very close to Statistics Canada data. What follows is a descriptive overview of these households.

Partnered Parents: Partnered couples with children living at home

Partnered couples with children living at home include married couples and couples living together in common law relationships, with children living at home. Some couples have children that do not reside with them in the household because of their age, or of living arrangements due to divorce or separation agreements. This group also includes a small number of additional adults living in the household, such as parents or adult siblings. Over one-third (41%) of the sample are partnered parents, with an average age of 42 years. Women make up over half of this group (57%). In terms of employment, 66% are employed with more than half (53%) working at home. The average yearly household income is between 50,000 to 75,000. Over half (56%) of participants in this group have a university degree, also slightly less than partnered couples without children living at home.

Partnered Couples: Partnered couples without children living at home

Partnered couples without children living at home includes married couples and couples living together in ‘common law’ relationships, but do not have children living at home. These couples may also have children that do not reside with them in the household. This group also includes additional adults living in the household, such as parents or adult siblings. One-quarter (25%) of the sample are partnered couples, and women make up just over half this group (53%). The average age is 47 years, slightly older than partnered parents. Slightly more partnered

couples are employed (71%), but just under half (49%) work at home. This household has the highest average yearly household income between 50,000 to 75,000.

Single Parents: Non-partnered adult(s) with children living at home

Non-partnered adult(s) with children living at home includes single (also divorced, widowed or separated) parents with children living at home, and includes other adults who reside in the household, such as parents, siblings, relatives, friends, tenants, roommates and so forth. The average age of other household members in this group is 69 years, the oldest of additional household members. This is a small participant group: eight percent of the sample are single parents, with an average age of 45 years. Women make up most of the participants in this group at 80%. Comparable to partnered couples with or without children living at home, two-thirds (65%) are employed with just under half (49%) working at home. The average yearly personal income is between 40,000 and 50,000, which is the lowest of all household types. Twenty percent have a university degree; this is the least educated household.

Single Adults: Non-partnered adult(s) without children

Non-partnered adult(s) without children includes single (including divorced, widowed or separated) adults who do not have children living at home (although they may have children living elsewhere). These participants also may have other adults residing in the household, such as parents, siblings, relatives, friends, tenants, roommates and so forth. This is the smallest household type with eight percent of the sampling living in households that consist of single parents. This is also the youngest group, with an average age of 26 years. Women make up just over half this group (58%), and just over half of them (53%) are employed. Just under half (46%)

work at home, the lowest percentage of all the groups. Participants in this group have an average yearly household income is also between 50,000 and 75,000. Under one-third (31%) of single adults have a university degree, likely due to their age.

Living Alone

This group differs from single adults in that participants live completely on their own in their household. Adults living alone make up 18% of the sample with an average age of 45 years. Women make up 39% of this type of household, the lowest percentage of women across all types. Two-third (63%) are employed with less than half (48%) working at home. The household income for those living alone is comparable to single adults with a mean income between 50,000 and 75,000, and slightly more (37%) with a university degree.

Home-Workers

In today's busy work world, there are many instances when people continue their work day outside the office, typically at home. However, the amount of time that people spend working at home can vary with respect to how many home hours are spent working, and the kinds of things they are working on at home. The amount of time spent working at home may also depend on other work related factors, such as peak business times for financial advisors and report card time for teachers. Other individuals who work at home may spend considerable more time working at home depending on the demands of their job, or they may in fact work full time primarily from home. Depending on how much time is spent on paid work at home, people can experience blurred boundaries between work and household (Sullivan & Lewis 2001). While for

some this may lead to conflicts, for others it also may mean more time spent at home with household members (whether there are conflicts or not).

Accordingly, it is worthwhile to categorize the amount of time people spend working at home. For example, a person who typically works 10% of their work week at home to catch up on office paperwork will not have the same experiences – both at work, personally and domestically - as a person who spends 70% of their work week at home. I argue that categorizing the percentage of a person's work week spent at home based on a typical work per week will help further contextualize the experiences of people who work at home in various capacities, and contribute to our understanding of the role that paid work plays in internet domestication. Simply dichotomizing those who work at home and those who do not work at home would miss the nuances of the amount and type of paid 'work' in the home, and its implications on the household and family.

Because I am describing and analytically interpreting paid work practices and internet domestication, additional detail and context is needed than what a dichotomous examination would provide. One survey question in the home-work section asked respondents what percentage of their workday is spent working at home. I characterize these survey responses into three different modes of paid work at home.²²

- *Full-timers*: Full-timers are individuals who work more than 30 hours a week at their main job. East York full-time home-workers do a majority of their paid work at home, between 51 and 100%. On average they conduct 30 hours of paid work at home per week.

²² The framework for these categories and descriptions of these categories are from Statistics Canada: <http://www.statcan.gc.ca/pub/71-222-x/2008001/glossary-glossaire-eng.htm>

- *Part-timers*: Part-timers are individuals who spend less than 30 hours a week at their paid job. East York part-time home-workers spend between 16 and 50% of their work week at home. On average they conduct 11 hours of paid work at home per week.
- *Over-timers*: Over-time refers to the hours worked that go beyond regular paid employment, and an employee may or may not be paid for this extra time. East York over-time home-workers spend between 1 and 15% of their work week at home and conduct an average of five hours of paid or extra work at home per week.

In total, 78 home internet users (32%) indicated on the survey that they conducted some type of paid work at home; just under half (46%) are over-timers, 24% are part-timers and 30% are full-time home-workers (see Table 2.2). Over one-third (32%) of survey respondents are employed in Business, Finance and Administration occupations. One-quarter (25%) are in the Social Sciences, Education, Government Service and Religion occupations, and 16% are in Sales and Service occupations. These categories are constructed using Canada (2006c) occupation categories.

Table 2.2: Home Workers in East York

	Over- timers	Part- timers	Full- timers	Total
% Type of Home-worker	46	24	30	100
<i>n=</i>	36	19	23	78
% Partnered Parents	33	53	48	42
<i>n=</i>	12	10	11	33
% Partnered Couples	28	37	17	27
<i>n=</i>	10	7	4	21
% Single Parents	11	0	9	8
<i>n=</i>	4	0	2	6
% Single Adults	6	5	9	6
<i>n=</i>	2	1	2	5
% Living Alone	22	5	17	17
<i>n=</i>	8	1	4	13
Mean Household Income	75,000- 100,000	75,000- 100,000	50000- 75000	75,000- 100,000
<i>n=</i>	24	11	18	53
% Women	44	58	48	48
<i>n=</i>	16	11	11	38
Mean Age	41	41	44	42
<i>n=</i>	36	16	23	78
% Canadian Born	69	63	61	65
<i>n=</i>	25	12	14	51
% Undergrad Degree	39	42	30	37
<i>n=</i>	14	8	7	29
% Advanced Degree	25	26	26	26
<i>n=</i>	9	5	6	20
Occupations (n=69):				
Health	16	24	5	14
<i>n=</i>	5	4	1	10
Social Sciences, Education, Government Service & Religion	25	24	25	25
<i>n=</i>	8	4	5	17
Art, Culture, Recreation & Sport	0	6	5	3
<i>n=</i>	0	1	1	2
Natural & Applied Sciences & Related	9	12	10	10
<i>n=</i>	3	2	2	7
Business, Finance & Administration	31	29	35	32
<i>n=</i>	10	5	7	22
Sales & Service	19	6	20	16
<i>n=</i>	6	1	4	11

Demographically, home-workers (broadly) compare to the survey sample with two exceptions: there are more Canadian born respondents in the home-workers sample, and there is a higher percentage of respondents with an advanced university degree in the home-worker sample compared to the survey sample. This is connected to the occupation broadly, as some of these employment sectors require higher education, and is reflective of demographic profiles of home-workers in general; individuals who work at home are more likely to have attained higher levels of education (Akyeampong & Nadwodny 2001).

More than one-third (35%) of the home internet survey participants who work at home were interviewed (n=27). The interviews are useful in placing the nature of paid work at home and domestic experiences into context. Interview participants were asked questions about their work at home schedules and routines, how paid work at home fits into their home life, and the implications of paid work at home on household relationships.

Immigrant Status

East York is a rich hub of diverse cultures; the diversity of heritage in Canadian born people and the growing number of Canadian immigrants in Toronto lends itself to a multi-cultural nexus. Research has noted that for immigrants, ICTs have facilitated relationships with friends and family in home countries via email, IM and video chat (Dechief et al. 2008; Katz 2010), and that the internet has been an invaluable source of information to aid new Canadian immigrants; searching for employment opportunities, ESL classes, Canadian traditions, or even transit information are searches characterized by their social world (Salaff 2003; 2004). Because 50% of East York home internet survey respondents are immigrants to Canada, it is noteworthy

to consider immigration status in understanding the social shaping of internet domestication and the cultural practices at play.

I use immigrant status to characterize the experiences of Canadian born and Non-Canadian born respondents. Non-Canadian born home internet users have been in Canada an average of 17 years (with a median of 27 years). Over half (58%) have been in Canada less than ten years. The demographic characteristics of Canadian born and non-Canadian born have some notable differences (see Table 2.3). Canadian born home internet respondents are better educated, with a significantly ($p=.04$) higher percentage employed, and a significantly ($p=.00$) higher household income. Canadian born respondents also have a significantly higher percentage working at home. These data are comparable to demographic profiles of Non-Canadian born individuals, who typically work in manufacturing industry or service sectors, and who typically earn less income than individuals born in Canada (Statistics Canada 2007b).

Table 2.3 Canadian Born & Immigrant Respondents in East York

	Immigrants	Born in Canada
% Canadian Born	50	50
n=	121	121
% Women	50	50
n=	67	67
Mean Age	41	43
n=	122	119
% Employed*	42	58
n=	65	89
% Work at Home*	35	65
n=	27	51
% Undergrad Degree	48	52
n=	38	41
% Advanced Degree	50	50
n=	22	22
Mean Household Income*	40000- 50000	75,000- 100,000
n=	90	87

* $p < .05$

Data Analysis

The combination of survey data, interview transcripts and photos of household internets provokes rich and interesting data to work with; descriptive data to paint a picture of today's households and their internet use, contextual data to understand how households integrated the internet, and visual data to grasp the social environment. As such, the analytical procedure for these various data encompassed a comprehensive investigative process not found in previous research of the household internet.

Survey Data

Raw survey data were entered into Statistical Package for the Social Sciences (SPSS) and cleaned (missing values and value labels) by NetLab research assistants.

Survey data are used in my dissertation analysis to provide an understanding and overview of the East York sample by offering the distribution and characteristics of the data (Sparks-Jackson & Silverman 2010). As such, I use the survey data as a way to summarize and describe the demographics of survey respondents and their internet use.

Because this is a qualitative case study, I use bivariate descriptive statistics to frame and portray the lives of East York internet users, and to complement the qualitative data. I use cross-tabulations for categorical data to describe the respondents, providing an overview of demographics (gender, age, education, income, marital status and so forth) and internet use (such as communication patterns). Furthermore, cross-tabulations also allow me to explore whether there is a relationship between these variables and to compare different groups of respondents (Carman 2004). Pearson's chi-square test of independence is used with the cross-tabulations to investigate and measure whether there is a significant ($p = <.05$) relationship between two variables (Sharp 1979; Zibran nd; Healy 1999). Because cross-tabulations and tests of significance do not necessarily reveal the type of relationship, I use the qualitative data to further understand the character of the relationship between these variables.

Cross-tabulations and chi-square tests require categorical data and cannot be used with continuous variables. Therefore, for continuous variables I use comparison of means tests in SPSS to investigate the differences in means between two or more samples (Stevens 2002). The independent variables are gender, home-workers, immigrant status, and household composition. The dependent variables are continuous, such as number of hours spent online from home. I employ an analysis of variance (ANOVA) to determine whether the differences in means are statistically significant.

Limitations of Quantitative Component

Survey data provide useful descriptive data as a starting point in examining the home internet practices in East York. However, as noted many of the nuances of home internet use, the practices surrounding its integration and people's experiences with it cannot be determined (or understood fully) with survey data. Here the qualitative component fills these contextual gaps, as I have previously noted.

Interview Transcripts

Qualitative research methods seek to examine and interpret social phenomena using non-numerical measures. Bogdan & Biklen (1992) argue that qualitative methodology is an inductive process that uncovers detailed events of people's lives, conversations and life events, which are often difficult to uncover using numerical or statistical methods.

Qualitative methods are also included in the research design in order to provide detail and context of the survey responses. In general, qualitative research seeks answers to questions by examining various social settings and the individuals who inhabit these settings.

Qualitative researchers, then, are most interested in how humans arrange themselves and their settings and how inhabitants of these settings make sense of their surroundings through symbols, rituals, social structures, social roles and so forth (Berg 1998). This makes sense particularly in relation to my dissertation research. Because the qualitative component of the Connected Lives Project takes place within the home, I am able to investigate, interpret, and understand how social experiences are created and given meaning by the participants (Denzin & Lincoln 2003; Glaser & Strauss 1967).

Qualitative methods provide a means of accessing unquantifiable facts about the actual people researchers observe and talk to, or people represented by their personal traces (such as letters, photographs, newspaper accounts, diaries and so on). In my dissertation, this pertains to the actual computer, the location of the household computer, and the construction and layout of the household. As a result, qualitative research methods permit researchers to share in the understanding and perceptions of people's social environments, and to explore how people structure and give meaning to their daily lives (Berg 1998). For these reasons, it makes sense to approach part of the data collection using a qualitative framework.

Audio files of the interviews were transcribed by NetLab assistants and saved as doc files for analysis, and loaded into NVivo. NVivo is a useful computer software tool for qualitative data that allows the researcher a simple and effective way to organize and analyze the material.

Coding the Interviews

Because the interviews were semi-structured, the coding of the transcripts are initially framed by the flow of topics and themes throughout the interview schedule (for example, household and family, working at home, health, culture, network structure and so forth). My coding scheme uses multiple layers of coding (see Appendix H). Layer one is the general topic or theme framed by the semi-structured interview guide and layer two stems from open coding and includes a more focused coding of the topic or theme. Within layer three coding, additional more focused and specific themes emerged and in some instances layer four uncovers additional themes. Coding from the general to the specific

allowed me to not only organize emerging themes, but this process also helped to provide social context of the interview participants. As such, the multiple layers of coding stem from grounded theory in which the researcher inductively develops concepts from the interview data (Strauss 1987; Charmaz 2006). Again, my intent here is not to test hypotheses, but to discover theory within the data (Glaser 1992). Coding in layers like this helps when generating coding reports and also allows me to recognize and understand patterns of household internet use and integration across the interview sample. Excerpts from interview transcripts are given throughout my dissertation to illustrate or highlight these patterns and to exemplify contextual domestication of the internet.

Intercoder Reliability

Intercoder reliability measures the validity of the coding process and the themes that emerge from the data (Kurasaki 2000; Neuendorf 2002). Independent coders analyze and code the same material “so that the researcher can see whether the constructs being investigated are shared and whether multiple coders can reliably apply the same codes” (Ryan & Bernard 2003; 283). East York interview transcripts were coded by two coders; for my dissertation, I coded the interview transcripts (as previously noted, framed by the interview schedule) and generated coding summary documents, and sub-coding summaries. I then created summary charts using Microsoft Excel Database,²³ where I could more easily view the coded material and add additional notes, keywords and commentary about emerging patterns. A second coder also coded the interview transcripts following the same process. NetLab research assistants coded the transcripts from general to specific and then

²³ I chose to use Excel rather than NVivo for this component of the analysis simply out of preference of usability.

generated a summary chart. Each coder focused on a particular aspect of the interview schedule when making their charts, notes and providing commentary.²⁴ My summary reports and summary charts were then compared with the second coder for comparable analysis²⁵ (Mitchell 1979).

Field Notes

Following the interview, interviewers took some personal reflexive notes about the interview that included impressions about interview, comments about the participant and household, things observed during the interview that were not captured on the digital recorder and so forth. These personal notes were then included in the interview summary. Each interviewer was asked to complete a summary of the interview, providing a synopsis or snapshot of the life of the participant framed by the interview questions, but also their personal insights. As such, each interview is accompanied by a summary story about the life of the interview participant and some personal commentary. Because my dissertation is a case study of internet domestication in East York, these field notes aid in understanding patterns that emerge in the interviews and help conceptualized the practices that shape internet domestication (Glaser 2003).

²⁴ Julie Amoroso focused on Home workers; Lindsay Cai – Households; Jennifer Kayahara – Culture; Clarissa Mok & Jackie D’Sa- Health

²⁵ This coding stage was not rigorously quantified. Instead, I met with the coder either in person or via telephone or IM voice chat. I perceived (and carried out) this stage in a more holistic manner where we would go through the reports and the notes we made and discuss them. In a couple of instances an interview excerpt was missed as an oversight or an example of something that the other coder had not thought of. This holistic conversational approach to the coding process is fitting to the overall qualitative focus of the dissertation.

Digital Photos

In some ways the digital photos that were taken in East York homes are an extension of the interview field notes and summaries. Digital photos of the home internet were taken at the end of the interview and included in the participant's 'folder', which included the audio file, interview transcript, interview summary & field notes, and photos of the home internet (in addition to their social network diagrams, which is not pertinent to my dissertation). Digital photos were logged into an Excel database to denote location of the computer, location of the computer noted on the original survey to note changes, in addition to observational comments about the photos (see Appendix I). These notes and comments not only helped to summarize observations, but this format provides an easier way to glean patterns, draw comparisons and understand the contexts of household internet use and integration as framed by household spaces. In some households, multiple pictures were taken of the home internet and the room in order to provide further visual context. Digital photos are provided throughout my dissertation in order show the context of home internet and enhance my description and interpretation of the home internet experiences of East York participants (Schulze 2007).

Limitations of Qualitative Component

Despite the rich contextual data interviews elicited from participants, there are some limitations to qualitative research processes. For example, researchers have noted potentially problematic power relations that exist between interviewer and participant, especially in instances where the interviewer is male and the participant is female. Feelings of trust, safety and comfort are often prevalent issues (Reinharz 1992), especially since

interviewers were at the participant homes. This may manifest itself as participants tailoring or shaping their answers based on what they think the interviewer wants to hear, or the participant may not feel comfortable revealing personal information even though it might be important to the research project. Interviewers did their best to start the interview with some casual conversation to help the participant feel more at ease.

Furthermore, the analyses of interview responses are situated within the researcher's own conceptual or cognitive framework, which may not be the same as the participant. Researchers are responsible for interpreting the results, and they do so based upon their own subjective understanding of the world (Smith 1990). This understanding may not be compatible to that of the participants and may lead the analyses in a way that was not intended. My analyses of the interview transcripts are located within the context of each individual household and circumstance in attempts to stay true to the participant's observation about their world. Field notes, observations and photos aided in showing (and reinforcing) the social context of interview data and like puzzle pieces, helped to put together the big picture.

Temporal Contextualization

As noted, the data collection for my dissertation took place between 2004 and 2005. In the years since, there have many changes to how people use the internet (such as the social media movement), and increased pervasiveness and ubiquity of internet use and integration (Wellman 2011). My dissertation research is not meant to represent the existing home internet landscape in 2011. Instead, my case study is meant to capture a moment in home internet history – a snap-shot - where this pervasiveness and ubiquity was still

developing and beginning to flourish. Some of this can be seen in the survey data (for example, there are more households now with more than one computer, and also laptops, netbooks, and tablets, ipods and tablets to consider). Moreover, excerpts of the interviews sometimes reveal aspects of home internet life at the mid-point in the first decade of the millennium that seem outdated (such as using search engines that no longer exist, or the prevalence of wireless connectivity in households). However, these moments remind us of the accelerated evolution and development of the ubiquitous internet, and our changing relationship with it.

Summary

In this chapter I introduced the Connected Lives Project and the research locale of East York, Ontario - an interesting and diverse borough outside of Toronto. I provided a demographic overview of home internet users by household composition, home-workers and immigrant status, which sets the stage for my discussion of the stories they tell during the interviews in the following chapters. I discuss the categories of inquiry I created within each of these; household composition is comprised of five categories - partnered parents, partnered couples, single parents, single adults and living alone. These five categories provide much more detail about household structure than the limited ones provided by Statistics Canada and US Census Bureau. Home-workers are categorized by the percentage of their workday spent working at home, rather than a dichotomous comparison of who works at home and who does not. I argued that working at home in different capacities shapes how the home internet is integrated. Immigrant status is categorized more simply into Canadian born and Non-Canadian born.

Framed by my investigation of internet domestication, I discussed the design of the research and my rationale behind this case study approach. I use multi-methods of surveys, interviews and digital photos, providing a rich and detailed data and experiences, which are useful in order to explore various practices - gender, paid work, household composition and immigrant status - that shape internet domestication. The 32 page survey asked about their use of ICTs, their social and family relationships, and how they spend their time. My section of the interview schedule explored questions pertinent to home internet use, such as about the location of the internet, personal internet use, how much time they spend online, times of the day they are online, and any potential interruptions when they are using the internet at home. Digital photos were also taken of the home internet in order to offer some visual context to the interview responses and additional interpretability of the social environment.

Contributions

My dissertation research is the first Canadian case study of the household internet that offers an in-depth portrayal and interpretation of its domestication. It is an empirical demonstration of the complicated patterns through which the internet is domesticated. My research builds upon previous home internet research, and contributes to the clear epistemological gap in what we know about internet domestication as a dynamic process. The triangulation of methods in my dissertation creates rich and detailed contextual stories, and they are a particularly compelling way to unravel different social practices at play within the home.

My use of survey data, semi-structured interviews and digital photos offers a novel combination of methods not implemented in previous research of the household internet. This case study will contribute to our understanding of how these framed practices work as threads that women and men weave together to shape their home-web. The following chapter is the first chapter of four that explores the role of varied contextual practices of internet domestication. In chapter three I consider the household internet broadly and discuss the acquisition of the home internet and its place in the home.

Chapter Three: *The Household Internet*

Introduction

As I look around my house, I note to myself the various technologies I own and use; aside from the typical domestic devices (refrigerator, stove, laundry facilities, and vacuum cleaner), my household contains numerous devices for entertainment (video game consoles, televisions, mp3 players, digital cameras, BlueRay player and more), for communication (landlines and cell phones), and for instrumental uses (computer/laptop and internet access). I am an early user of computers from Control Data Inc, where my grandfather worked in the early 1980s, and an early adopter of the household internet in 1995. In the mid-1990's dial-up internet access was the only way to connect to the internet at home, and this often meant that people calling my home would get a busy signal. As such, I had an additional phone line and jack installed to accommodate this conflict. I think back to what a thrill it was to be on the internet and using the landline at the same time. When high-speed internet became available in my area in the late 1990s, I was one of the first to jump on the broadband wagon - I had already outgrown dial-up internet access.

My technology ownership and use reflects the work I do (teaching and researching ICTs and virtual culture), which often spills into my social and leisure time. Having a child (who is as geeky as me) also lead to owning multiple home computers, and gave me an insider perspective of a digital native (Palfrey & Gasser 2008): a generation Z child born in the internet age. For me – a single mother - it has always been important and essential to stay on top of advancements in internet technology; my personal life, my parental life and my work life have all shaped my household internet choices.

Individual Internet Use

Changes in personal computing took place with the inception of internet access in the mid 1990s. Early internet studies spent considerable time and effort naming and documenting the ‘digital divide’ in order to understand the barriers to internet access and use of the individual user. For example, 1994 studies (GVU 1994) show that only five percent of internet users were female, marking a clear gendered digital divide (Shade & We 1993) (even in 1998, women only represented 34 percent of internet users). Additional research point to more differences; African-Americans are less likely to use the internet than whites (Ebo 1998; Spooner & Rainie 2000); seniors are less likely to adopt and use the internet than other cohorts (Loges & Jung 2001; Fox 2004); people in low income brackets are less likely to adopt and access the internet than higher income brackets (Moss & Mitra 1998). This left us with a clear picture of the individual have-nots.

More recently, digital divide discussions have broadened to include geography: broadband access continues to be an issue in rural communities (LaRose et al. 2007; Selouani & Haman 2007) and many less developed countries have no access to computers, landlines or electricity (Fuchs & Horak 2008). Moreover, basic literacy continues to be a problem in North America, while other internet users lack adequate technological skills to effectively utilize the internet (Hargittai 2002; 2010; Hargittai & Shafer 2006).

Household Internet Use

Most of the discussions in the late 1990s and early 2000s concern barriers to internet use that focus on the individual user. With the onset of internet connectivity to household computers, and people’s increasing access to the World Wide Web – mostly via dial-up

through the landline - researchers probed internet adoption within in the home. The home became the central hub for internet use (Bakardjieva & Smith 2001) and in terms of the household internet the story told about internet adoption and use is much the same: households with higher incomes, more education and children show higher rates of internet use and adoption (Hoffman, Kalsbeek & Novak 1996; Venkatesh 1996; Jennings & Wartella 2004). Parallel comparisons are drawn from research outside of North America: in the United Kingdom, income and education are also strong predictors to internet adoption in the home (Anderson et al. 1999; Robertson, Soopramaniena & Fildesa 2007; Jackson et al. 2002).

Much of the previous research gives a limited understanding of the social world surrounding these individuals and only a generalized idea about the kinds of households that are most likely to have the internet in their homes. No story has been told about the household internet: how and why it gets there. HomeNet's (1998-99) research addressed how low-income families made active decisions about the household internet within the framework of their income capacities. Household internet was used to communicate with family and friends (often long distance) and worked to decrease the cost of their landline utility bill. It was much less expensive to use Voice over Internet Protocol (VoIP) (calling over the internet) than to be charged long distance fees by the telephone company (Kraut et al. 1997). In this situation, socio-economic status frames their need, and they use the net to save money.

Low income households also acquired the internet for their children because they felt that they would be 'levelling the playing field' by giving their children access to information and technological skills to succeed in their future. Even today we see the importance of not

only providing home internet access for homework assignments, but also the importance of teaching children computer and internet literacy skills (Hargittai & Hinnant 2008; Hargittai 2010). The significance of the HomeNet study is that it is one of the few studies that show the complexity of household internet adoption and how and why the reasons for internet adoption and use for low-income families can differ greatly than those in a higher income bracket (Bier et al. 1997; Bucy 2000; HomeNet 1995-99; Jackson et al. 2002; Gurstein 2001; Armstrong 1997).

The problem with this previous work is that the analyses tend to focus on specific characteristics (such as gender, race or age) or two combined aspects of internet use (such as race and income), rather than investigating how these different aspects may weave together to shape a particular kind of domestication experience. Therefore, in this chapter I broadly ask: *in what ways do paid work, immigrant status, and household composition contribute to household internet ownership?*

My expectations are that there will be differing experiences and motivations across these different aspects driven by different personal and household needs, which ultimately drive internet acquisition and use. To address the research question, my investigation begins with the survey results in order to describe some home internet practices, such as internet use at home, multiple computers with internet access, and the location of these access points in the home. This is followed by a discussion of the themes that emerged from the interview transcripts, with a focus on household internet acquisition. To examine the various practices that contribute to the shaping of internet acquisition, I consider my three key frameworks of household composition, paid work and immigrant status. I investigate how internet practices

within these frameworks shape home internet acquisition needs differently, and thus begin to reveal different patterns of internet domestication.

Survey Results & Findings

Multiple Computers

In keeping with the investigation of how the domestic internet is shaped, I first turn to the descriptive survey data, which suggest some differences between the contexts and frameworks I am exploring (see Table 3.1). For example, just over one-third (38%) of home internet users have more than one computer with internet access, yet single parents and single adults have a higher percentage of multiple computers than other household types ($p=.00$). This seems to challenge previous research that asserts the prevalence of multiple computers in households with parents and children. Households with home-workers have a higher percentage of multiple computers with internet access (46%), with more than half (55%) of full-time home-workers having multiple computers. This seems to make sense in households that might need to separate work and online leisure activities. Canadian born and Non-Canadian born home internet users are comparable with respect to owning more than one computer with internet access (38%).

Table 3.1: The Household Internet in East York

	High Speed	Dial Up	Home Network	Mean Years Online	Multiple PCs	Internet in Private HH Space	Internet in Public HH Space
<i>Household Composition</i>							
Partnered Parents	83	16	33	7.1	38	65	49
<i>n=</i>	77	15	25	97	36	63	47
Partnered Couples	71	30	22	7.5	34	61	44
<i>n=</i>	43	18	11	57	19	36	26
Single Parents	75	25	32	8.2	65	50	45
<i>n=</i>	15	5	6	20	11	10	9
Single Adults	78	22	36	6.5	63	74	47
<i>n=</i>	14	4	5	19	12	14	9
Living Alone	66	31	17	8.1	18	63	35
<i>n=</i>	27	14	5	41	7	25	14
Total	76	24	28	7.4	38	63	48
<i>n=</i>	176	56	52	234	85	148	105
<i>p=.002</i>							
<i>Home-Workers</i>							
Over-Timers	77	23	29	8.2	36	59	50
<i>n=</i>	21	8	9	36	11	20	17
Part-timers	84	16	44	8.7	53	72	50
<i>n=</i>	16	3	7	17	9	13	9
Full-Timers	87	13	56	8.4	55	82	37
<i>n=</i>	20	3	10	23	12	18	8
Total	82	18	40	8.4	46	69	46
<i>n=</i>	63	14	26	76	32	51	34
<i>Immigrant Status</i>							
Non-Canadian Born	69	30	29	7.1	38	57	52
<i>n=</i>	79	34	27	119	42	67	61
Canadian Born	82	19	27	7.7	38	69	38
<i>n=</i>	97	22	25	116	43	81	44
Total	76	24	58	7.4	38	63	48
<i>n=</i>	176	56	52	235	85	148	105
<i>p=.07</i>						<i>p=.05</i>	<i>p=.03</i>

Location of Home Internet

Looking at where the computer with internet access is located in the home, the prevalence of the internet in more segregated and private locations (such as an office/study or bedroom) appears as a popular location choice for many home internet users, more so than public or communal (kitchen, recreation/family room, living room) locations. Single parents have the most comparable split between having the internet in a private (50%) and public (45%) space. Yet, across different contextual comparisons, less than half keep their home internet in a public household space, with the exception of non-Canadian born respondents (52%). Immigrants tend to put their home internet in more public areas of the home.

Internet Connection Speed

Just over three-quarters (76%) of home internet users have high-speed access, with partnered parents having the highest percentage connecting this way (83%). For home-workers, it is higher; 82% have high-speed internet access and again, full-timers have the largest percentage (87%) connecting via high-speed. A more striking difference in type of internet access can be seen when looking at Canadian born and non-Canadian born home internet users: 82% of Canadian born home internet users have high-speed home internet compared to 69% of non-Canadian born.

Years Online

In terms of how long home internet users have been online, most households are comparable, with the exception that single parents have been online the longest (a mean of 8.2 years), whereas single adults have been online a mean of 6.5 years – perhaps not

surprising given they are the youngest group of home internet users. Home-workers have been online slightly longer (about one year) than the overall average. Canadian and non-Canadian born are comparable at a mean of about seven years.

Hours Spent Online from Home

Looking at home internet use broadly, cross-tabulations and chi-square suggest no significant relationships between the average number of hours spent online from home and gender, and gender and household composition. Broadly, households spend a mean of ten hours per week online from home with single adults spending an hour more (see Table 3.2). Looking at the women and men within these households, women living alone spend the least number of hours online from home (4.7 hours), where as single adult females spend more than twice that time (a mean of 10.7 hours per week). This is a noticeable contrast to single adult men, who spend on average the most number of hours online from home at 13.6 hours per week. Although the relationships are not significant, the two-three hour time differences raises some questions about why these differences might exist, and what might be going in their lives outside of home internet use.

Different kinds of home-workers are comparable overall in terms of home internet use. However, full-timers are online longer than other home workers ($p=.07$); twice as long (14.2 hours) compared to part-timers (6.9 hours). This makes sense given the benefits of using the internet to do paid work at home. Yet looking closer, female full-timers spend the most number of hours online from home (a mean of 18.6 hours per week), considerably more than female over-timers (6.8 hours) and male over-timers (7.1 hours). Again this raises

questions about the role the internet plays in conducting paid work at home, and how it is (or is not) incorporated into household life.

Similarly, immigrant status also suggests some noteworthy differences in home internet use. Home internet users not born in Canada spend on average almost three hours more a week (11.3 hours) online from home than Canadian born home internet users (8.7 hours; $p=0.09$), despite the fact that fewer Immigrants have access to broadband access. Males who were not born in Canada spend the most number of hours online from home, a mean of 13.3. Perhaps this is related to employment status and education level (see Table 2.3), as there are less employed non-Canadian born than Canadian born respondents; they may simply spend more time at home.

Table 3.2: Hours Per Week Spent Online from East York Home

	Household Composition	Mean	N	Home-workers	Mean	N	Immigrant Status	Mean	N
Men	Partnered Parents	9.4	42	Over-timers	7.1	20	Not born in Canada	13.3	55
	Partnered Couples	11.3	28	Part-Timers	11.5	8	Born in Canada	9.0	54
	Single Parents	9.8	4	Full-Timers	10.2	12	Total	11.2	109
	Single Adults	12.5	8	Total	8.9	40			
	Living Alone	13.6	27						
	Total	11.2	109						
Women	Partnered Parents	9.9	56	Over-timers	6.8	16	Not born in Canada	9.7	66
	Partnered Couples	9.4	32	Part-Timers	7.5	11	Born in Canada	8.6	66
	Single Parents	9.5	16	Full-Timers	18.6	11	Total	9.1	132
	Single Adults	10.7	11	Total	10.4	38			
	Living Alone	4.7	17						
	Total	9.1	132						
Total	Partnered Parents	9.7	98	Over-timers	6.9	36	Not born in Canada	11.3	121
	Partnered Couples	10.3	60	Part-Timers	9.2	19	Born in Canada	8.7	120
	Single Parents	9.6	20	Full-Timers	14.2	23	Total	10.1**	241
	Single Adults	11.5	19	Total	9.6**	78			
	Living Alone	10.1	44						
	Total	10.1	241						

** $p < 0.10$

The differences in home internet ownership and general use – some subtle, and some not subtle – between households, women and men, home-workers, Canadian and non-Canadian born respondents hint at suggestive varied contexts of home internet use. Here it is prudent to use qualitative data, such as interviews and photos, to further probe why people decide to ‘acquire’ home internet, why they place the internet where they do and the reasons they have more than one internet access point in their households.

Reasons for Acquiring the Home internet

In keeping with the qualitative investigation of how the domestic internet is shaped, I first turn to why people decided to acquire home internet. Interview participants were asked: “What made you decide to get the internet in your home?” This question allows us to see not only what things are important to people, but also how things external to the household can contribute to the social shaping of the household internet. The responses were coded from the interview transcripts into keywords (as provided by the participants): children, communication, information, work, and education (see Table 3.3). The reasons given by participants suggest that they have some ideas about what home internet can offer them, and their household members.

Table 3.3: Reasons for Adopting Internet in the Home

	Work	Communication	Information	Children	Education
<i>Household Composition</i>					
Partnered Parents	13	11	5	3	1
Partnered Couples	8	6	1	2	2
Single Parents	6	3	2	2	0
Single Adults	2	2	0	0	0
Living Alone	5	5	1	0	0
Total	34	27	9	7	3
<i>Home-Workers</i>					
Over-Timers	7	1	0	1	1
Part-Timers	3	3	0	2	0
Full-Timers	7	5	0	0	0
Total	17	9	0	3	1
<i>Immigrant Status</i>					
Not Born in Canada	13	19	9	2	1
Born in Canada	21	8	0	5	2
Total	34	27	9	7	3

Paid Work

Interview participants note that the main reason they acquired the household internet is because of their paid employment, suggesting that paid work plays an important role in the kinds of technologies that households choose to adopt. That paid work is an important motivator for home internet acquisition may not be surprising, given the historical uses of the home computer for telework and home finances. As such, it is worthwhile to explore what further significance paid work has when public life converges with private household spaces and what this means in relation to the domestication process.

Communication

Communication²⁶ ranks as the second most important reason for acquiring home internet, followed by information²⁷, children²⁸ and education. This is consistent across household compositions, home-workers and non/immigrants. However, one of the most striking differences in reasons for adopting home internet can be seen between Canadian born and Non-Canadian born participants. For interview participants born in Canada, paid work was the most important reason, but for Non-Canadian born participants, the most important reason was for communication. This is not surprising given how easily and inexpensively one can communicate online, and it supports the findings of the HomeNet study that also noted the importance of inexpensive online communication tools. The different reasons for acquiring home internet suggests that these participants have a sense of the kind of benefits the internet will provide them. However, the benefits vary in terms of their importance or relevance. These individuals made an active choice to acquire the home

²⁶ See chapter four for further detail and discussion about internet communication.

²⁷ See chapter five for further detail and discussion about seeking information online.

²⁸ See discussion in this chapter: Household Dynamics & Internet Use.

internet, but the decision to do so was framed by their needs and the needs of those around them.

Discussion: Immigrants & the Transgression of Geographical Boundaries

Internet communication is notably important to immigrant populations (Panagakos & Horst 2006), and the families they leave behind (Rodriguez et al. 2009); online communication tools work to bridge spaces between places that are geographically far away from each other (Collins 2009). As such, having internet access in the home to connect with long-distance loved ones is vital to some immigrants.

Bridging Physical Distances

East York immigrants note that they acquired home internet for communication, and this differs from Canadian born participants who note paid work as the main reason. The stories told in the interviews about home internet acquisition support previous research that asserts the importance of having the home internet to communicate with family back home. Originally from Argentina, Lisa describes the importance of having home internet:

Lisa: For foreign families, the computer is a communication a means of communication with our loved ones. When [my son] was born, my laptop broke up. So I said to my husband, plan to buy a desktop now. Now.

Interviewer: You need it?

Lisa: Now, yes because we have to share our joy with another families and our loved ones. I want to show the baby. I want to show my mom who's there and it's like this (snaps her fingers).

Lisa's experience of home internet acquisition points to the important role online communication tools play in the lives of immigrants in East York, and how this need shapes decisions to acquire the home internet. Nora's experience of home internet acquisition is similar:

Interviewer: What made you decide to get Internet in the home?

Nora: Main reason was to connect with the family members back in Pakistan with MSN Messenger, and the next thing is that every day we use it.

Although Nora's motivation to acquire home internet was to communicate with family in Pakistan, she is seemingly surprised at how pervasive these interactions had become.

Transnational Communication Needs

For some immigrants in East York, home internet acquisition is framed as a *need*, rather than a luxury item. In other words, the home internet is conceptualized as an essential household technology, and the importance of staying connected with loved ones is apparent in the stories told by immigrants in East York. Sometimes financial choices have to be made and negotiated in order to maintain home internet access. Zowie from Karachi describes how she and her husband mediate household costs in order keep home internet access:

Monetary situations sometimes have been difficult, especially when it comes for all three [landline, mobile and internet]. Phone line we only keep for local calls and stuff. In essence, it's just a random line and stuff. But that too, for my husband it was a toss-up between keeping [the internet] and the mobile. We actually sat

and did quite a few calculations: if I kept a mobile and he kept a mobile, and we got rid of this, how would this happen? It wasn't too feasible because I get a lot of Avon calls and a lot of long ones...and that really ran up my bill. So, that's why we kept [the internet]. His mobile, he just uses it for emergency calls and stuff...The computer we can't do without because that's the best way for us to keep in contact with our family.

Terrance, originally from Jamaica, also talks about decisions that have to be made when finances are constrained, revealing how important it is for him to have home internet:

We actually started with Bell Sympatico because they had a deal at the time. And it wasn't such a great deal after the introductory period ran out. It wasn't so great after that. So, we switched to Rogers. It turned out to be a much better deal, because we try and economize. So, we had to cut cable out of it. It's a choice, which one do I want? Definitely internet. I will take Broadcast TV, but when we had Sympatico, it was one or the other. We chose the internet.

Home internet takes precedence over other ICTs like mobile phones, and other home extras like cable television. This would suggest that immigrants do not perceive home internet as a frivolous past-time or simply a leisure activity, instead home internet is a vital utility.

Terrance further explains: "Well, it's treated as an essential. So it's like rent, the internet (laughs). So it's definitely, it's not even considered as an option. It's just absolutely

essential”. Vamos from Romania expresses his sentiment about the need for home internet access: “Here I can’t live without computer. In Canada, it’s another kind of life.”

The home internet needs of immigrants are often framed by the geographical distance from their close relationships, and the need to interact easily and inexpensively. These needs and expectations of what the internet can provide differs from Canadian born participants who point to mostly work reasons for home internet acquisition. These findings support previously research about the importance of internet communication to immigrant, and contribute to our understanding of how ICTs like the internet have transformed immigrant experience into a transnational process that has redesigned family networks, rather than losing them all together (Bacigalupe & Lambe 2011).

Discussion: Home-Workers & Permeable Boundaries

I examine home-workers by grouping them into different percentages of the workday they spend working at home: over-timers (1-15%), part-timers (16-50%) and full-timers (51-100%). It is a compelling way to consider different paid work practices in the home, rather than simply looking at whether one works at home or not. The nuances in how home work is carried out varies for someone who spends a small percentage of their day working at home compared to someone who spends most of her/his day working from home. Doing paid work at home can include finishing off administration or emailing clients from home (extending the workday into the home without pay), to part-time work at home arrangements, to working full-time from home. The internet is increasingly being used to facilitate work from non-workplace locations. The relocation of paid work to the home offers people more flexibility and greater control in the organization of their work day (Sullivan & Smithson 2007).

However, working at home can create permeable boundaries between the home and work spheres that can be problematic to home workers and their family members (Kurland & Bailey 1999; Schieman et al. 2009). It is often difficult to integrate childcare and domestic work into the paid work day, which can lead to a breakdown of household routines or efforts to separate home and work (Kaufman-Scarborough 2006). Depending on how much work time is spent at home, conflict can ensue if family members are forced to ignore their spouse or parents in the home during work hours (Kurland & Bailey 1999; Salaff 2002).

Although the descriptive survey data suggest that the home internet is often found in private household spaces, there is not really a story to tell about why these private spaces might be needed for home internet use. The interview commentary provides the context of these private spaces, and the mediation between work and home boundaries with respect to where one does the work. For example, Francine is an over-timer who consciously tries to limit the amount of work she does at home and relegates her work laptop to a separate corner in her house. Over-timer Vincent needs silence for his work-related internet research so his wife uses another computer or watches television in a different room so that he is not interrupted. Separating work, internet and family spaces like this are examples of how home-workers might mediate the integration of public and private, and also how the presence of other household members also shape internet use in these spaces.

Spatial Buffers

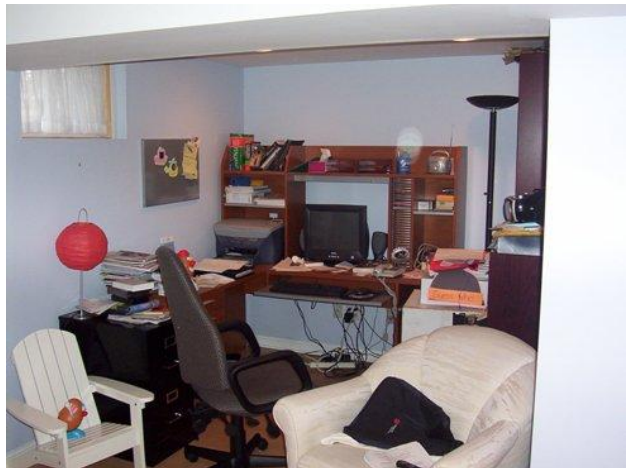
Part-timer Yvonne explains her understanding of the separation of work and home space. Although she does work at home, she feels it is important not to work ‘out of the home’. She explains:

My office is at the back of the house. It's funny, when I come from my office into the house it feels like I'm going to a whole new place. So, the work stays pretty separate from my house. That's why I have a separate office for my psychotherapy; a lot of people work out of home and I don't want to 'work out of home'.



A physical or spatial buffer between home and work sphere is often necessary for home-workers. Theresa, a full-time home-worker policy analyst is willing to do her work in a more public household area (such as the living room or kitchen), but feels that keeping her paid work in a separate space interferes less with household activities:

You'll see when we go downstairs - I have things all over the desk. But I know that nobody's going to touch them, you know what I mean? If I had things sprawled out on the kitchen counter or whatever, I can guarantee that they wouldn't be there when I went back the next night. We actually had this conversation 'cause my husband went down there and he was like: "when are you gonna put the stuff away?" And it's okay if it takes me a couple of weeks to get to it because that's out of the way and nobody's going to touch it.



However, a separate space for home-workers does not necessarily mean working alone or without family interruptions, especially for full-time home-workers who are home more than other types of home-workers. Beth, a full-time self employed financial consultant shares the workspaces in her home with her husband who also works from home as a self

employed economist. Both have a separate office space in the basement, and she finds it necessary that they have this extra workspace based on her previous experiences:

We bought this particular place because of the basement. We thought it was an ideal space for an office. The place we were in before was a smaller semi-detached with an unfinished basement. It was only my husband who was self employed at that point, but we had his office set up in one of the bedrooms and it was a nightmare. I mean there just wasn't enough room for anything.



Beth's story is pertinent because she and her husband actively made the decision to purchase their home because of their home-working needs, suggesting the importance of paid work in people's home lives. People make room for the internet; they rearrange their living spaces to incorporate the home computer. This also suggests not only how much space a home office with assorted technologies can consume, but also how the home internet, the workplace and the household intersect to shape a particular experience of domesticating the internet.

Spatial Conflicts

While physically separating work places from home spaces can help establish boundaries, it is not always fool proof. For Hedda, a full-time Public Relations home-worker, having a separate office is not enough to communicate to her two children (ages 14 and 8) the boundaries between home and work:

I have a separate office and a special place, which I used to keep

locked when they were younger and I think I might go back to

locking it. You know, I go to find a pen [and] I'm missing a pen because they're always in there. I have a designated area.

To avoid problematic convergences between home and work, there is often a need to achieve a spatial separation between work and domestic areas or to designate separate technologies for home and work. Multiple computers (home internet access points) can alleviate some of the stress of delineating or sharing work spaces at home. For those with only one household computer with internet access, challenges surface with dividing computer time among family members. Consider full-timer Olivia's situation:

The computer does get used; the rest of the family does use it, but minimally because that is my business computer. Matter of fact, at one point my youngest son was downloading music and downloaded a virus - and that was a big problem. So, when I took it in at that time I was able to get the computer technician at work to fix it so I got him to take out the CD writer and the sound card and all that. So, it's just like "it's no good to you anymore right?"...just so that the temptation wouldn't be there for him to download when I wasn't around.

Because Olivia's household only has one computer with internet access, her work computer is also used by her children. Keeping work documents secure and computers protected can be much more challenging if others in the home are using your workspace as well.

Contested Boundaries between Work & Home

Broadband internet access offers users 'always-on' connectivity; email applications can be left running and difficult to ignore. Workers who do more work from home can have less rigid barriers between their home and work life and more temptation to check and/or respond to emails - even when they are finished their paid work day. As Olivia, notes:

...One of the things that happens a lot is, because I work from home, one of the perils I guess...is that...I should turn it off. I always hear it beep when there's an email. And if I am out in the kitchen or something I have to go look and see what it is about.

Work demands (whether at the workplace or at home) can be demanding; fuzzy work and home boundaries plus the ease (and temptation) to continue working past business hours can potentially interfere with domestic lives. For example, full-timer Sean recognizes that his concentration on his online work sometimes causes him to shut out his wife and son.

Therefore, he tries to work around the schedules of his family members:

If I'm on the internet, I'm generally very, very focused, and if my son or wife call for me I sometimes...I don't hear them, simply because I'm too focused; that's anti-social. My son actually comes up to me and shakes me just as I sometimes have to do when he's focused on a favourite television program, and he won't hear me or listen to me. It's more hearing than listening, and I don't think that's fair...we're very respectful of each other, and when our son asks - we stop, listen, respond, and when I'm here and I don't do that. So, I try to do it when they're not there.

Sean's household internet use is not only shaped by his paid work demands, but also by the needs of his family, showing how contextual internet domestication is. Vincent (over-time documentary researcher) now forces himself to take a ten day home-work break during the Christmas season because the computer has encroached into his family life. He talks about his interactions with his wife before and after the household internet:

If I didn't use the computer two or three hours in the evening, I could have more time to speak with my wife. We used to speak a lot in France, because I hadn't a computer. So, usually in France, afternoon, we used to say let's take a coffee or a pizza – go out. Here, I haven't any time to go with my wife. Here, for me, the quantity of work is more important because I have the computer.

Work & Family Convergences

Not all experiences of home-workers are negative, and even those who note the problems with contested home and work boundaries acknowledge the benefits of conducting paid work at home. Leanne points out the how the affordances of the household internet help her not only with her work, but also when family issues arise:

I think [the internet] improves quality of life and productivity significantly. You know for instance, Krista's home sick today and my husband has an appointment in the morning, and I said: "that's no problem." I'll work from home in the morning because I can work from home with the internet and have all my tools, so certainly I think it's had a positive effect.

For some home-workers, a lack of clear boundaries is part of their employment reality and does not seem to be a major concern. For example, Heather, a part-timer who works with her sister in television production does not have a set schedule for working at home and her days off vary, and this is part of her job. For Wanda, a full-time self employed medical researcher, work and home also life blend together; she does not schedule breaks for herself and will continue working even if she has a personal visitor. Wanda's home at times resembles the workplace, as her living room is sealed off as a laboratory for a short time and strangers regularly call her home line for medical advice (granted Wanda does not have children).

Heather and Wanda's situation denote an important factor in the home-work experience: the nature of their work means that they must respond to consumer or client demands that often preclude having a strict routine or clear boundary between work and home life. In fact, Greta, a full-time building superintendent epitomized the general sentiment of these workers when she says "this is not only my home, it is also my workplace". This contrasts to home-workers participants (like Yvonne) who really want and need the spatial segregation – physically and mentally. Here the varied experiences of home, work and home internet intersect with different implications of these intersections. As such, the social shaping of the domestic internet differs between different kinds of home-workers.

Discussion: Household Dynamics & Internet Use

As the home-workers note in the interviews, despite often having the home internet in private household spaces, there is considerable convergence between work and home. Similarly, although the home internet provides considerable affordances for various kinds of home-workers, it can also contribute to these blurring lines, and ultimately further shape

internet domestication. In many of these households, family members play a role in how and where work is carried out at home. Similarly, family members also help shape internet domestication beyond work related reasons, and this might constrain access and use or encourage the purchase of additional computers (or laptops) with internet access.

Tensions, Conflict & Competition

Because of the many benefits the household internet provides (communication, information, social, leisure and play), parents and children alike want to use the home internet - and likely at the same time; after work or school and weekends are prime internet time. Issues such as who can access the internet, at what time and for how long can create competition or conflict between family members (Frohlich & Kraut 2002; Ribak 2001).

Prue, a 39 year old partnered parent describes some of this competition between her two children:

Prue: Madison and Jason definitely have their arguments where she wants to go into one site, and he wants to go into another.

They'll be sitting there and doing a game - more so her. She gets in there and she wants to be aggressive and take the mouse and show him how to do it because she gets impatient watching him try to do it. So, that I don't like.

Interviewer: Do you arbitrate it?

Prue: Yeah, only if it gets too far, if they can't figure it out, absolutely. You know, and they'll often try to both sit on that chair, versus coming and getting a chair from here, and put it there.

So eventually we're like, "Could you just bring another chair over so there's two chairs?"

Sometimes tensions can surface between partners when both want to use home internet and there is only one computer, yet even these situations are mediated between couples, as partnered parent Nadia explains:

Nadia: I'll be like "please, please give me five minutes", and he'll be like "ok", and I'll take five minutes. Then I'll take ten minutes and he comes back...it's not serious...For him, [the internet] is really important because he searches for jobs online. So that is very important.

Interviewer: So that takes precedence?

Nadia: Oh yeah, definitely. If he says, you know, he has to reply back to somebody to send out his resume and samples of work or he's looking for something, oh yeah, then I'll definitely give it up. I'll give him the space.

Mediating Conflict - Scheduling

Hierarchies of access between family members are also established – the kind of internet use is that most important and what tasks are most vital (paid work and homework versus leisure and social activities) is decided amongst family members. Brent, a partnered parent, talks about how home internet use amongst the children is organized by his wife in his home:

Interviewer: How do you resolve it when both the kids are clamouring to use Internet at the same time?

Brent: It was a matter of establishing priority, more than anything else, and we learned very quickly, that to head off those kinds of arguments, you start asking the kids ahead of time, what projects do you need to get done, what things do you have to do this week, when are they due, and then prioritize for the kids so they weren't fighting. Because, like most kids, they procrastinate, they put it off until the last possible moment. By planning ahead, we were able to avoid having their last possible moments arrive at the same time.

Interviewer: That's excellent planning. Did you have them present a written schedule?

Brent: No, not written, just negotiated. The head referee over here [points to his wife]. I lose patience and go "It will be this way!" She would negotiate far longer than I would.

Comparable to the HomeNet study, the interviews suggest that parents feel that the internet is important for their children's education; writing assignments, doing homework, conducting online research, and building computers skills are important affordances that parents feel the internet provides, and this takes precedence over its leisure and social aspects. The perceived worth of the internet manifests itself into adoption, use and integration, which is shaped by the needs of the household.

In households with one internet access point, access and use is contingent on other household members, which helps frame how it is domesticated. Although the survey data

suggest that people are fairly comparable in terms of how much time they spend online, interview stories tell us much more about their social world when they are online – or trying to get online from home. Susan (partnered parent) tells a similar story of how everyone's home internet use is shared and scheduled around one another, in particular when there are personal deadlines:

Susan: At one point when we had one computer, and everybody was in school including me, that was really incredible. That was a tough one.

Interviewer: How did you manage that?

Susan: Who's ever deadline was the tightest. So what we tried to do then, when they realized that Mom was serious, I needed the computer, I had that time slot and my time on it was long. That was also document processing, but basically it's like "I'm going to need the computer all evening, or all weekend or so if there's something you need done, think about it ahead of time. You know, these nights that I'm working, you know, when you get home from school and I'm still at work sort of thing. So introducing them into project management, this timeline...

Mediating Conflict – Multiple Internet Access Points

It is not surprising that in some households additional computers with internet access in the home might be needed to alleviate some of this strain, and this also suggests that the acquisition of the home internet is shaped around people's household needs. For example,

Hilary – a married mother of three children – describes the competition for the household internet in her home before each of her three children were given their own computer with internet access:

Interviewer: How did that work – the sharing?

Hilary: Not so great. [It was] the whole reason why they got their own [computer] for Christmas the one year.

Interviewer: People fighting over them?²⁹

Hilary: Yah, for the most part - yah. Well, because they'd all want to use them at the same time of course. There's only so much time between after school and bedtime - they'd all want to use them.

Donna, a 49 year old partnered mother of three children, has a story is similar to Hilary before additional computers with internet access were purchased in her home:

Yah, my kids all wanted to share at the same time or wanted to use it. Someone needs to check their email, and you know someone else wanting to be on the internet, use the computer...usually I have to step in. Because someone's downloading music or someone's doing something or whatever and we have to sort of prioritize that homework comes first...I mean there's not tons and tons of arguments about that. When you have three kids there's bound to be the occasion. Sometimes it's just one just wants to bug the other one, pushing buttons, push their buttons, it's just, you know.

²⁹ 'Them' refers to two computers in the home previous: one with internet access, and one without.

In both of these examples, the internet needs of household members outgrew one computer, and there was a clear need for additional home internet access points. This need stems not from leisure or social needs, but educational needs; building computer skills, access to research and completing homework assignments (Hargittai & Hinnant 2008; Hargittai 2010).

Summary

This is the first chapter of my dissertation that investigates and interprets different practices shaping internet domestication. At the beginning of this chapter I asked: *in what ways do paid work, immigrant status and household composition contribute to household internet ownership?* I began by using the survey data to describe home internet use; the type of internet connection respondents have, how many years they have been online, the number of computers with internet access, and whether the internet is in a private or public household space. Such a descriptive portrait across the different social realities of households, home-workers and immigrants has not been done to date in previous research.

The survey findings show some variations in home internet use, and this supports my argument about the importance and the role of different social practices involved in internet domestication. For example, home-workers have a higher percentage of multiple computers with internet access, with more than half of full-time home-workers having more than one computer. Also, the prevalence of the internet in more segregated and private locations in most homes is in contrast to immigrants who tend to put their home internet in more public areas of the home.³⁰

³⁰ See chapter six where I discuss some constraints faced by participants living in apartment buildings or old houses.

Similarly, additional differences are evident between immigrants and non-immigrants when looking at connection speed; more Canadian born respondents have broadband than immigrants do, with almost one-third using dial-up. However, despite the connection speed, immigrants spend more hours online than Canadian born respondents do, and this might be connected to their need for online communication.

I use the interviews to follow up on these data, revealing the importance and complexity of one's social world in the domestication process. My findings suggest that immigrant status, paid work, and the household intersect to shape a particular experience of acquisition and use – the first phase of domesticating the internet.

The interviews reveal that paid work is a key reason why individuals acquired the home internet. This implies that there is some meaning attached to the machine, and an understanding of how the home internet can and will be used for work reasons (Lally 2002; Silverstone & Hirsch 1992), and this may motivate choices made about home internet acquisition and how it may be used initially. But as the stories imply, when public spaces creep into private domestic spaces, these initial uses may change and develop. Despite the attempts of some home workers to separate work and home, the needs of family members surface and they must be attended to. Household spaces that have been designated as private work spaces are sometimes encroached upon by children and partners. Home-workers recognize that despite the sometimes problematic converging spaces, the internet allows them the flexibility to be able to share time with their families, even if it is sometimes conflicting.

I also discussed how acquiring the home internet for communication is very important for immigrants, and this differs from Canadian born participants who most

frequently say work is the most important reason. Interview participants share personal stories with interviewers about how the need and desire to stay in touch with loved ones far away led to home internet acquisition.

Looking at household dynamics also illustrates how one's immediate social world can shape choices made about the internet. In homes where there are multiple internet users, tensions can surface when multiple people want access. Some families mediate these conflicts by scheduling time or weighing the importance of the task at hand. Other families purchase additional computers to alleviate the potential for conflict all together. The stories told about how families mediate the increasing ubiquity of home internet use points to the complexity of understanding home internet ownership, the first stage of internet domestication.

Overall, my findings in this chapter strongly suggest that different households, paid work expectations, and immigrant status shape why people acquire the internet in the home, how much they use the home internet and where it located in the home.

Contributions

My findings in this chapter fills some of the conceptual gaps that exist regarding home internet ownership and use; few have investigated the reasons why people acquire the home internet, and none have considered different aspects of one's social world (such as household composition, paid work and immigrant status) that contribute to the social shaping of internet domestication. Of note, my research demonstrates how institutions external to the household, such as the paid workplace can encroach in private household spaces in ways that can both benefit and constrain. This is in support of previous work that has examined

contested boundaries of home-workers (Kurland & Bailey 1999; Glavin et al. 2010), but my examination of home-workers, framed by the percentage of their work day spent at home, offers a novel investigation and depiction of converging paid and unpaid work complexities.

My research contributes to our understanding regarding the complexity of different kinds of boundaries that are contested within the home. For example, the blurring boundaries between paid work and home denote spaces in the home that are increasingly blurry, and sometimes contested. For immigrants, geographical boundaries are transgressed when the home internet is acquired; families can communicate with their long-distance loved ones online to dissolve the spatial gap.

My research also contributes to our understanding of the various and different needs that people may have in their social world, and this also shapes internet domestication. In households with only one internet access point, internet access and use in the home is framed by notions of priority and need, each household member takes his or her turn at the home internet. These kinds of mediations within the home are missed when only looking at survey data. The needs of household members also persuades some people to acquire additional computers with internet access; as the interviews reveal, acquiring computers with internet for their children (and sometimes their spouse) often alleviates conflicts or struggles over internet time.

On the other hand, the needs of immigrants are framed by their need to communicate with family. The stories that immigrants share illustrates the significance of the home internet. It is so important that these immigrants situate the home internet as a necessary household utility. These varying examples of home internet experiences and needs contribute

not only to understanding internet domestication, but the value and meaning behind the home internet.

The following chapter - “Communication: networked households” further investigates the social shaping of the household internet. I examine internet communication specifically, and practices shaping communication patterns from home.

Chapter Four: *Communication: Connected Families*

Introduction

I often start my weekday morning at the computer where I respond to emails and catch up on social networking sites. Much of my day takes place at my home office, and communicating by internet to friends, relatives and work peers is steady throughout the day. But not all of my online interactions are with people outside my home; I also connect with my teenager via ICTs when he is not at home and when he is at home. For example, just before lunch I receive a text message from my son while he is at school: “so bored in this class”. Entertained, I text a pithy response to which he does not reply. In the afternoon he sends another text message saying he will be a few minutes late coming home because he has some work to do in the computer lab. I text him back letting him know that I am running errands and won’t be home when he gets there. He sends me a text to let me know he has made it home – and to remind me to buy Coke.

Later in the day, dinner is almost ready and he’s not responding to verbal calls because he’s listening to music on his headset. I send him an IM through *Skype* to let him know, and he replies that he will be right up. After dinner, we play *Modern Warfare* (a multiplayer video game) on the Xbox 360 (we each have our own), where we set up a game lobby with his school friends and my friends (all local) so that we can chat on the headset during our game play. Later that evening, my son sends me an email with a link to a laptop that he is really interested in for school, and we talk about it face-to-face before he goes to bed. In my home, staying connected with my teenager throughout the day is vital as a single parent, and using these tools gives me some peace of mind about his whereabouts and safety. But more importantly, I find that using these tools with my teenager is not only engaging and

entertaining when we are home together but not in the same room, but they act as a generational bridge between parent and child. Our use of ICTs is individual, but we are connected and networked together as a family

To some people, my domestic ICT scenario is unfamiliar; why not just walk into my son's bedroom downstairs and tell him face-to-face? For others, the interactions via cell phone with my son are quite familiar; they share a similar experience about connecting with their children throughout the day using the internet and cell phones. My communication patterns with my son are shaped by my immediate social reality: my work, my role as single mother and the social and leisure practices I engage in are actively mediated by the internet and cell phone. Moreover, the interactions with my son throughout the day – especially when we are not face-to-face – gives me the sense that we are always connected and allows us to communicate where we once could not.

Internet Communication

Research about online communication is certainly not scarce; communication is one of the main reasons for using the internet (Katz & Rice 2002) in addition to information, recreation and commerce (Howard, Rainie & Jones 2002:). However, not all communication is the same; people communicate in different ways, with different tools and for different reasons – already hinting at a social shaping process at play in internet use and integration. For example, gender differences in computer-mediated communication (CMC) has garnered much attention, and research shows that women communicate more than men do: women are more socially driven, whereas men are more instrumental and task oriented (Herring; 1994; 2000; 2006; Cushing 1996; Bimber 2000; Rainie 2000; Dryburg 2001; Sungh 2001; Boneva

& Kraut 2002; Kennedy, Wellman & Klement 2003; Cooper 2006; Jones et al. 2009).

Demographic differences, such as age, race and socio-economic status are also discussed: ethnic minorities, people over the age of 50 and those with low-incomes communicate less often via ICTs than other groups and for different reasons (Spooner & Rainie 2000; Thayer & Ray 2006; Jackson et al. 2008; Hargittai 2008), which reflects the typical digital divides previously discussed.

There is considerable focus on individual demographic indicators to show differences in frequency and use of ICT communication. While these studies are clearly valuable in pointing out socio-economic inequalities that exist with ICT communications, the focus is on individual users who again seem separate from the social world surrounding them. There is a sense that not all ICTs are used the same to communicate, and this advocates the social character of ICT use and integration. As a social scientist, I want to know more about why these differences exist and with what implications. This chapter looks more closely and how and why people use the internet to communicate with people living in their homes: *in what ways do paid work, immigrant status and household composition shape internet communication from home?*

My expectation is that there will be varying communication patterns that are driven by complex needs amongst these different social aspects; home-workers need to communicate with clients or work peers, couples need to stay connected with partners and children, and immigrants need to interact with far away loved ones. To address my research question, I first discuss previous research concerning household communication tools such as landlines, email and cell phones to show both pitfalls and notable findings within this knowledge base. Next, I focus on my analysis on communication patterns by respondents

and consider the role that paid work, immigrant status and household composition play, and how these different contexts frame not only use and integration of communication tools, but how use is shaped and domesticated by the social worlds of its users.

Household Communication Tools – Landlines, Cell Phones and Internet

Landlines

The residential landline is perhaps the most appropriate communication device to begin with, not only because it is the oldest household communication device, but because its integration into these households shows a great deal about the socio-cultural relationship between people and technology. The unintended development of the landline marks several important factors to how technologies become integrated into people's lives and how technologies are reinvented by people and the world around them (Fischer 1994). Most notably, the maturity of the landline reflects a social development that focuses on social and cultural conditions that shape and limit its use and integration (Fischer 1994). This challenges deterministic claims about people and technology and hints at how people actively shape their technological landscape. Rakow notes: "the telephone...is not simply a mechanical device but a system of social relationships and practices" (Rakow 1992: 2).

Previous research about the landline exemplifies the role of women in the development of the home telephone, and how domestic ideology framed home telephone use and integration (Martin 1991). Women used the landline to mediate isolation by connecting with their friends and family and to coordinate their domestic responsibilities (Rakow 1992). Women were perceived as the key social communicators and kin-keepers in contrast and ancillary to men's instrumental and business use of the landline. While women utilized the

telephone to their benefit, its use and integration – and ultimately its domestication - actually worked to perpetuate gender stereotypes, reinforce domestic ideologies and thus continued to situate women in the domestic sphere. Therefore, although women were active agents in the development of the home telephone, their actions are framed and situated within the domestic sphere they exist in. However, this is not to say that women lacked power in the process. Martin's (1991) research discusses how women actively (though perhaps unconsciously) resisted the prescribed uses of the landline by telephone companies and continued to utilize the technology in ways that suited them and their needs. Importantly the integration and ultimately the domestication of the home telephone suggests that domestication is interconnected with other social practices: gender roles, domestic ideology, socio-economic status, consumer practices (marketing and advertising), and workplace changes and demands (phone operators and telework).

Cell Phones

Landlines are primarily communication tools tethered to the home, situating them within a certain context and process: the people who live in the home, the relationships between them and the roles they play. Cell phones however, are not rooted in one location and they offer mobility for use in any location, whether this is in-home or on the road. The mobility of cell phones means that people are accessible at all times and conversations can happen anywhere. The adoption and use of cell phones is different than the internet and this should not be surprising given the lower cost of cell phones (and the cost of cell phones have continued to decrease considerably over the years), and because there is less skill required to use them compared to personal computers. Because cell phones are much more accessible

financially and more usable than the internet, studies show that cell phones are widely used across all demographic groups, including income, gender, ethnicity, and education, and while there are no significant predictors to cell phone use, younger cohorts are most likely to adopt and use cell phones (Ling & Haddon 2008; Ling 2004; Rainie & Keeter 2006; Auter 2007). Most studies assert that people use cell phones because they are easy to use, handy in an emergency, and a practical way to stay connected with people (Baron & Ling 2007).

Despite the similarities in cell phone ownership and use broadly, there are some differences in how people use cell phones. For example, although women and men use cell phones in similar amounts, previous research has shown that their communication patterns are different, they do different activities on their phones, they maintain their social networks via cell phone differently, and women are more likely to customize and decorate their cell phones than men are (Wei & Lo 2006; Leung & Wei 2000; Lemish & Cohen 2005; Chen & Lever 2006; Hijorth 2005; Igarashi et al. 2005; Lee 2004; Rees & Noyes 2007; Baron 2010; Baron & Campbell 2010). Cell phone research also suggests social and cultural implications: people's attitudes, behaviours and values have changed because of the lifestyle changes taking place, and these changes have been facilitated by mobile telephony (Hanson 2007; Rainie & Wellman 2012). With people constantly on the move, cell phones allow people to instrumentally (task oriented) connect with people or to socially interact with their contacts and family members. However, this mobility and 'always on' status can blur public and private spaces leading to stress, additional workload (whether paid or unpaid), and conflict among household members (Chesley 2005).

There are also new and emerging social practices surrounding cell phones occurring around the world; text messages take precedence over voice calls in Japan, cell phones are

used as fashion accessories, or for collective action and smart mobs (Ito et al. 2005; Fortunati 2001; Rheingold 2002; Ling 2004; Stump et al. 2008). Globally, cell phone adoption is very high in developing countries or countries with emerging technologies, and this has been attributed to lower broadband integration (internet) in these areas (Horst & Miller 2006). North Americans adopt and use cell phones less than European and Asian countries, giving us an indication of varying needs and use among populations and the social-cultural relationship between people and technology (Baron & Ling 2007).

However, there are limited studies about family cell phone communication that falls outside of the scope of parental supervision and concerns about what children are doing when they are not at home. There is very little research that examines how partners, parents and children stay socially or instrumentally connected throughout the day on their cell phones to schedule or plan events - or even just to say hello (Kennedy et al. 2008; Bell 2006). Therefore, while mainstream media touts the internet as a possible catalyst for the breakdown of the family and the time family members spend together³¹, few researchers have actually examined the way family members keep in touch by cell phone when they are not together face-to-face in order to tackle this concern.

Internet

Email provides numerous social affordances that a landline does not. An email can be sent at any time, from any place with internet access, to any location across the globe – without the cost of long distance fees. Conversations can be immediate, or asynchronous that can span over hours, days or weeks. Importantly, one does not have to respond immediately,

³¹ For example: “Family Time Decreasing with Internet Use” (Center for the Digital Future 2009) and “Family Eroding in U.S. as Internet Use Soars” (USA Today 2009)

but instead when the time is best for the user. Communicating with others by email is much less intrusive than a late night phone call, and can be quickly sent out in the cracks and crevices of people's day. Email allows home internet users to connect (and reconnect) with their social ties; creating, maintaining and nurturing their relationships (Boase & Wellman 2006).

Instant messaging (IM) on the other hand, allows for synchronous, real-time communication that can include video or just simply textual conversations. IM can offer interaction on a more personal level with audio and visual, than email can provide. IM offers a convenient and simple way to connect with friends and family (Birnholt 2010; Nardi et al. 2000), and can both enhance workplace productivity (Renneker & Godwin 2003), or it is also known to distract employees at work (Garret & Danziger 2008). Youth and teenagers are touted as most frequent IM users, who use it to sustain some virtual relationships, and enhance local ones (Lenhart & Lewis 2001; Lenhart et al. 2005), despite media reports and research about potential perils of IM chat rooms for young people (Ybarra & Mitchell 2008).

In addition to demographic descriptors about ICT users and communication uses mentioned previously, some research has begun to consider the household context of ICT communication and moves beyond individual demographic indicators to explain household communication. These studies suggest variances in communication patterns between parents and children and how computers and the internet affect family relationships broadly by identifying conflicts over computer use or excessive use by a family member (Lally 2002; Cumming & Kraut 2001; Hughes & Hans 2001; Anderson 2003; Mesch 2003; 2006; Mezaros 2002; 2004; Lanigan et al. 2009). Others recognize how computer mediated communication (CMC) is situated within personal needs and domestic contexts (Bakardjieva

& Smith 2001). For example, Miyata's (2002) research argues that mothers use email to connect with other mothers for social support (Miyata 2002). These examples are noteworthy because they suggest that people's communication patterns are driven by their social world – in particular, gender differences in how and why women and men communicate, and how these gender roles are tied to domestic responsibilities. Despite these pointers, there is very little research that examines household communication and how family members use email to communicate with one another – whether socially or instrumentally.

The lack of contextual research about family communication via the internet is rather surprising given the rich analyses of the landline previously noted. Most research concerning cell phone and internet communication between family members thus far fails to incorporate key socio-cultural practices that landline research so vigilantly demonstrates. While we have some sense of the differing patterns of communication between household members (for example, children using the internet and cell phones more than their parents) and some understanding of potential implications of the internet on relationships within the home (for example, keeping children electronically leashed), there is a clear gap: few studies examine how and why people use the internet from home to communicate and stay connected and what social practices shape this household communication.

Survey Results & Findings

Hours Spent Communicating Online from Home

The survey data describe online communication patterns from home (see Table 4.1), yet a comparison of means across different home contexts and home workers do not yield any significant statistical relationships. For example, different types of households are

comparable, with single adults spending slightly more time online, on average about an hour longer (a mean of 4.8 per week) more than other types of households. Given the age group of this household type (the youngest), it is not surprising that they are communicating online longer; more time available, less domestic constraints, and more social events (Fox & Jones 2009).

Although there are some slight differences between types of home-workers, the mean number of hours spent online communicating from home are not significantly different. On the other hand, Non-Canadian Born respondents spend almost two hours more per week (4.3 hours) communicating online from home than Canadian Born respondents (2.6 hours) do. Presumably because some of their friends and relatives are not local, the internet used more to connect and maintain these long distant relationships, which supports previous research.

Although not statistically significant, some interesting things can be observed. For example, although women (3.6 hours per week) and men (3.2 hours per week) on average spend about the same number of hours communicating online from home, single adult females and female full-time home-workers spend the most number of hours communicating from home (a mean of almost six hours per week). Similarly, immigrant women spend slightly longer online communicating than men do. Therefore, while the overall time women and men spend communicating online from home do not reveal any significant differences, time online is spent differently within pockets of one's social world.

Table 4.1: Mean number of Hours per week spent communicating by Internet from home

	Household Composition	Mean	N	Home-workers	Mean	N	Immigrant Status	Mean	N
Men	Partnered Parents	2.8	39	Over-timers	2.9	20	Not born in Canada	4.0	52
	Partnered Couples	3.0	25	Part-Timers	4.0	6	Born in Canada	2.4	51
	Single Parents	5.3	4	Full-Timers	3.3	12	Total	3.2	103
	Single Adults	3.5	8	Total	3.2	38			
	Living Alone	3.6	27						
	Total	3.2	103						
Women	Partnered Parents	3.5	51	Over-timers	2.8	16	Not born in Canada	4.6	57
	Partnered Couples	4.0	30	Part-Timers	3.0	11	Born in Canada	2.7	66
	Single Parents	3.2	16	Full-Timers	5.6	10	Total	3.6	123
	Single Adults	5.8	11	Total	3.6	37			
	Living Alone	1.9	15						
	Total	3.6	123						
Total	Partnered Parents	3.2	90	Over-timers	2.8	36	Not born in Canada	4.3	109
	Partnered Couples	3.6	55	Part-Timers	3.4	17	Born in Canada	2.6	117
	Single Parents	3.6	20	Full-Timers	4.3	22	Total	3.4**	226
	Single Adults	4.8	19	Total	3.4	75			
	Living Alone	3.0	42						
	Total	3.4	226						

** $p < 0.10$

Emailing from Home

Looking at who people email from home sheds some light on the role these pockets or contexts play when communicating online from home (see Table 4.2). For example, full-timers email more frequently from home than other types of home-workers – to household members ($p=.03$), friends ($p=.01$), relatives, and for work or school. Because full-timers are home more than other types of workers, it makes sense that their communication hub is from home – and that they are sending more emails from home.

Overall, women and men are comparable in terms of the mean number of emails sent from home to household members, friends, relatives, and for work or school reasons. However, women who work at home actually send slightly fewer emails from home than men do, which seems to contradict women as kin-keepers, but perhaps hinting at other factors, such as the time one has available to be online from home. Previous research as argued that because women are still primary responsible for domestic work and childcare, there is less online home time (or leisure time) available when compared to men. This could especially be an issue for women who have younger children at home with them when they are working.

Different household compositions do not reveal any significant differences in the number of emails sent from home to various social ties, with the exception of single respondents who send almost twice as many emails to friends than partnered respondents do. Furthermore, although Non-Canadian Born respondents spend more time communicating online from home, the mean number of emails sent to various social ties is not significantly different than Canadian Born respondents. This presents an interesting query about what other types of internet communication they might be using instead of email, such as instant

messaging or video calls, and why they may choose one type of internet communication over another.

Table 4.2: Mean number of emails sent from Home per week

		Household Members				Home-workers				Immigrant Status						
Household Composition		Household Members	Friends	Relatives	Work/ School	Household Members	Friends	Relatives	Work/ School	Household Members	Friends	Relatives	Work/ School			
Men	Partnered Parents n=41	2.0	5.6	3.5	2.3	Over-timers n=19	<1	4.0	2.7	2.1	Not born in Canada n=53	1.9	5.8	3.5	2.6	
	Partnered Couples n=26	1.3	3.9	2.4	5.2	Part-Timers n=8	1.9	4.9	2.9	7.9	Born in Canada n=51	1.0	6.6	3.2	4.8	
	Single Parents n=4	0.0	6.3	3.0	2.5	Full-Timers n=12	1.6	12.4	3.8	6.5	Total n=104	1.4	6.2	3.3	3.7	
	Single Adults n=8		6.0	3.6	2.0	Total n= 39	1.1	6.7	3.1	4.6						
	Living Alone n=25		9.6	4.0	5.3											
	Total n=104	1.6	6.2	3.3	3.7											
	<i>n= 70</i>															
Women	Partnered Parents n=54	2.3	4.3	3.1	5.6	Over-timers n=15	<1	5.3	2.5	6.5	Not born in Canada n=62	1.8	5.2	2.6	3.4	
	Partnered Couples n=32	1.0	5.6	4.5	1.2	Part-Timers n=11	2.5	4.5	3.1	4.9	Born in Canada n=63	1.2	7.0	4.0	3.9	
	Single Parents n=16	1.4	10.6	2.5	3.2	Full-Timers n=11	4.2	7.6	3.3	15.3	Total n=125	1.5	6.2	3.3	3.6	
	Single Adults n=10		9.8	1.5	3.1	Total n=37	2.0	5.7	2.9	8.6						
	Living Alone n=13		6.8	3.2	2.6											
	Total n=125	1.7	6.3	3.3	3.6											
	<i>n= 100</i>															
Total	Partnered Parents n=95	2.1	4.9	3.3	4.2	Over-timers n=34	<1	4.6	2.7	4.0	Not born in Canada n=115	1.9	5.5	3.0	3.0	
	Partnered Couples n=58	1.1	4.8	3.8	2.8	Part-Timers n=19	2.2	4.6	3.0	6.2	Born in Canada n=114	1.1	6.8	3.6	4.3	
	Single Parents n=20	1.1	9.7	2.6	3.1	Full-Timers n=23	2.8	10.1	3.5	10.7	Total n=229	1.5	6.2	3.3	3.7	
	Single Adults n=18		8.1	2.4	2.6	Total n=76	1.5**	6.3**	3.0	6.6						
	Living Alone n=38		8.6	3.7	4.4											
	Total n=229	1.7	6.2*	3.3	3.7											
	<i>n= 170</i>															

***p* < 0.10

Sentiments about Email Communication

When survey respondents were asked whether email improved communication with household members on the survey (see Table 4.3), a slightly higher percentage of partnered parents (45 percent) agree that email has improved communication with household members than partnered couples (40%) and single parents (30% - although not statistically significant). Again, consider that partnered parents may have to connect throughout the day out of necessity because there are simply more people to organize and more responsibilities than other types of households.

Table 4.3: Email has improved communication with household members

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Partnered Parents	18%	27%	20%	23%	12%	100%
(n=)	13	20	15	17	9	74
Partnered Couples	19%	21%	29%	19%	13%	100%
(n=)	9	10	14	9	6	48
Single Parents	20%	10%	50%	20%	0	100%
(n=)	2	1	5	2	0	10
All	17%	24%	28%	19%	13%	100%
(n=)	24	31	34	28	15	132

Discussion: Communication Complexities

The number of hours spent online communicating from home, and the number of emails sent to household members, friends, relatives, and emails for work or school seems to situate the home as nexus for online interaction in varying capacities - contextual communication experiences. However, the descriptive data only tell a partial story about online communication from home. Interviews, on the other hand, offer more perspective

from the standpoint of the user and provide some depth to the quantitative findings typically reported in previous research. Of interest here are the kinds of things that are going on in the home that shape how the internet is used to communicate with others.

The Benefits of Email

Internet communication is loaded with possibilities and benefits in use. These benefits - or affordances - are social opportunities and constraints provided by the internet (Wellman et al. 2003; Boase 2006), and it provides individuals with possibilities of use and a framework of potential benefits. As noted, an email can be sent at any time and any place with synchronous or asynchronous conversations taking place. Internet communication, whether email or instant message, offers flexibility in use in various scenarios.

Communication with clients or one's employer tends to be indispensable for both self-employed workers and home-workers, and it is not surprising that full-time workers frequently send emails from home. When asked about his most important daily work task, full-timer Clay, a sales manager for various major corporations responded:

Actually it's completely about what you're here talking about, which is communication. You have to in sales be a good networker: presentations, emails, phone calls, faxes.

Similarly, for full-timer Dorothy who does not have a separate business phone line at home, email is a professional medium that she uses to mediate home and work spaces:

Yah, I guess it's just easier because I don't have an office; it's almost easier to email people, because if I leave my phone number then I might not be there, the kids will answer. I do leave my cell

phone more often than not, but it doesn't work very well in the house. It's kind of complicated to leave a phone number when you don't have a business phone number so I tend to use email just cause its – it's just easier.

Communication can be from anywhere throughout the day, an important benefit for those who are always on the go. Email offers less intrusive contact throughout the day. Over-timer Penny communicates with her husband by email when they are both working and notes the benefits of email:

It's faster. So when you have a busy work day, [you] quickly send an email and say: "Does this work for you?"- Versus me picking up the phone and calling.

Penny's use of email to connect with her husband is shaped by her own work world and her husband's work, plus the pace of their schedules. Email is quick and less intrusive than landline or cell phone calls and the best way for her to connect with her husband. Again, this suggests the different factors at play and the significance of the workplace in shaping a domestic internet.

The Challenges of Being Always-On

Pervasive broadband and 'always-on' connectivity, portability, personalization and global connectivity incite affordances of internet use and integration (Wellman et al. 2003). However, although the internet provides opportunities of use, not all the technology is beneficial; one might argue that being 'always-on' is not a really benefit, but in fact a

constraint or nuisance – depending on the circumstance and context. As Olivia, a consultant who works full time from home notes:

And one of the things that happens a lot is, because I work from home, one of the perils I guess... is that... I should turn it off.. I always hear it beep when there's an email. And if I am out in the kitchen or something I have to go look and see what it is about.

Although there are numerous benefits of internet communication, the implications of these affordances should be contextually explored further in order to reveal further advantages and disadvantages. For example, the interviews suggest that some over-time workers make a conscious decision not to be reachable by email at home, recognizing the potentially invasive nature of email, cell phones and mobile devices such as Blackberries on the family time.

Overtime worker Penny laments during her interview that when she and her husband drive north to their cottage on Fridays, she spends the entire time preoccupied with work emails, rather than talking to her husband. Because Friday is her designated day to do work at home, she is willing to concede this time to her work. However, she is extremely possessive of her non-work hours and has been trying to train herself to ignore work emails on her Blackberry when she is 'out of the office'.

Other home-workers try to avoid communications during irregular working hours. For example, Theresa, who has been doing work part-time free lance since the birth of her 16 month old, sends email and makes phone calls during the day in between caring for her son, but does her main work at night when he and her other children are asleep. Theresa's scenario points to how her domestic responsibilities (in this case childcare) shape how and when she uses the internet to communicate from her home.

Theresa's example also suggests how using the internet to communicate from home to conduct paid work at home can offer home-workers more versatility, but doing so can also mean that the boundaries between work and household can become less clear (Schieman & Glavin 2008; Sullivan & Lewis 2001). Working at home creates permeable borders between the home and work spheres, as Theresa's situation suggests (Kurland & Bailey 1999). Attempts to integrate childcare and domestic work into the paid work day can lead to a breakdown of household routines or efforts to separate home and work (Kaufman-Scarborough, 2006). Again, while there are clear affordances, there are also potential negative implications within home and family, depending on the situation.

Discussion: Different Communication Choices

Home-workers take advantage of email to conduct their work and mediate their schedules. For others, there are different ways to communicate online from home that provide additional benefits. For example, the interviews point out that for Non-Canadian born participants, instant messaging (IM such as AOL, MSN, Yahoo!) and video chats are important ways to stay connected with far away family and friends. Terrance, originally from Jamaica notes that IM actually negates the amount of email that is sent between his family and friends, because they are always caught up through chat programs. Hannah from Latvia chats on MSN often with her friends in Turkey and Sweden, and Nora and Innis (both originally from Pakistan) both share aspects of daily life with friends and family via IM.

Enhancing Textual Communication with Audio & Visual

What is often missing in quantitative measures about online communication from home is the importance of these communication tools, why they are being used, and the context of the interactions. In Lisa's situation, she prefers email but notes how IM is sometimes more suited to the context of her conversation:

Lisa: I use [IM and email] but I prefer the email.

Interviewer: Why?

Lisa: Because I need time to think. I feel more comfortable with the email. But sometimes messenger is useful because all the people want to see the baby and his development: his first teeth, his first words and all my loved ones are so anxious for our times – first times here. So “How you feeling?”; “How's the time?”; “How's the weather?” So, I put the camera – I show the window...

Lisa uses IM for situations that call for synchronous interaction, but her email use from home reflect different kinds of conversations:

Lisa: They are so interested about the weather because it's opposite, you know? How do you feel about [being a] mother? Because nobody think I could be a mother because I was married for 12 years before I was pregnant. So those type of things. The movies too, I have a friend who love seeing the movies. So, what kind of movies there are? Why in Canada there are no European movies? This kind of thing. Or, what kind of eating? Where you could found typical meats?

Interviewer: So they ask you a lot about Canadian culture?

Lisa: Yes. All the day.

Lisa also notes that she takes many pictures and emails them to family. For Lisa, online communication from home is shaped by her need to stay in touch with far away family and friends, and the needs (and perhaps expectations) of these family and friends who still reside in her home country of Argentina. Keeping connected is vital to Lisa and her family.

Asynchronous & Synchronous Instant Messaging

Originally from Karachi, Zowie's situation is similar to Lisa's story. During the interview Zowie notes how catastrophic it would be if something happened to her home computer. Zowie stays in touch with her parents via IM daily, and long distance landline fees would impede phone calls – they simply would not be able to afford it. She and her parents often leave IM for each other if someone is away from the chat window – using it asynchronously instead. Where home-workers might make decisions to separate communication situations that blend work (public) and home (private), Immigrant participants like Lisa and Zowie take active measures to ensure that their online communication with loved ones is integrated and included within their day. Additionally, Zowie explains the importance of IM in her life:

I do a lot of instant messaging because I'm basically in touch with my cousins and my friends. I have friends that are online from Karachi and they're all online at different hours. My sister is in London, so she's online five hours ahead. My mom and dad are from Karachi so because of that – that is the reason why I said

about 4 hours. But I don't know...as far as family stuff is concerned, it's the best thing that could happen to me because post from here to Pakistan takes about 7-8 days and with England, it depends – sometimes 5 to 8 days. So here it's instant, I knew instantly – my sister, she had to take her daughter to the doctor, the hospital – she's coughing: 'So, how's she doing?' You know, you can do stuff like that.

Again, the benefits of IM – the synchronous interactions - keep Zowie's long-distance relationships active and personal. In some instances, IM chat rooms can foster some feelings of familiarity and closeness found in the physical world. Zowie explains:

Yeah, it's just like a telephone. In fact, Yahoo! Is a lot better than MSN because my sister comes online from England and my mom is online from Karachi and then three of us can get into one room and talk. So, it is just like a...all of us will be talking and we cut into each other...(Laughs)

Zowie parallels her online conversations to that of a telephone because of the voice connection, but her experience reveals the constraints of one-to-one landline communication; in chat rooms, Zowie can have a conversation with several family members at once to simulate experiences they have shared in the physical world previously.

The online communication experiences of Non-Canadian born interview participants reveal that there are active choices made about the kind of internet communication they choose to use from home. In some instances, asynchronous email works best, while in other situations synchronous IM offers more intimate engagements with visual and audio. These

active communication choices in use and integration reflect the varying and complex social worlds of East York participants, and the different ways people can shape the domestic internet.

Examining the experiences of immigrants in East York shows the social aspects of online communication in which individuals are using the internet to foster and enhance existing relationships, and in the process perhaps even creating new ones. The internet certainly allows for such flexibility. And, while the experiences of home-workers suggested numerous benefits of internet communication that enable them to carry on their work outside the traditional workplace, doing so can have larger implications within their homes and the relationships within these households.

Discussion: Household Complexities

Household composition offers a further glimpse of the contexts of internet communication. Survey data may indeed tell us a mean number of emails sent, but qualitative data shed further light on what may be happening within the home, and the kinds of roles and responsibilities people have within these homes that work to shape home internet use. In other words, the content and premise of these interactions move beyond the social (saying hello or chatting) to more instrumental interactions (task oriented). These instrumental uses of communication tools within the home can also be framed by domestic roles and responsibilities.

Instrumental Communication

Similar to results from the HomeNet studies, interview participants note how inexpensive internet communication is compared to landline long distance fees, and this is a clear incentive to use the internet rather than landline or cell phones. As Sally states: “and, it’s cheaper you know? Than picking up a phone and having that phone call”. As noted, email can be answered in between the cracks and crevices of a busy day and these intermittent connections help keep family members threaded together when they are not face-to-face. Email is a useful way to keep track of what partners and children are doing throughout the day. As partnered parent Penny says: “It’s faster, so when you have a busy work day, to quickly send an email and say, ‘Does this work for you?’ versus me picking up the phone and calling”. Again, this suggests that email can not only be social – just to say hello – but instrumental for people who are accountable to one another in the home and who need to share information or organize schedules. Partnered parent Sally explains:

Sally: I know he’s honestly on the computer a lot during the day.

Not all day, but a lot, and I know he checks his emails frequently, so I can usually catch him there. Not that he doesn’t have a cell phone all the time with him and stuff like that, but I’d rather just zip off an email to him...I emailed him today, I can’t even think what it’s about – like, “are you going to be home today after school to take the dog out?” You know - that type of thing.

Peter, also a partnered parent tells a similar story of the instrumental affordances of email for his household members and how this shapes email use:

Interviewer: You mentioned that you email Janet, your wife. What kinds of things do you email her about?

Perry: That would be sports schedules, stuff like that: I'm going here, we're going there. They have to go here, they have to go there: "Can you take them?" You know? Dental appointments: 'Well, now I'm taking them to dentist at such and such, [so] put this in your schedule at work'".

The premise of these emails between partnered parents is similar; email allows them to use email in ways that suit their personal needs and the needs of their household members – schedules, children's activities and more. This is not to say that there is no social-ness in these instrumental connections between partners throughout the day. But instead this implies the importance of understanding the context of internet communication and how the household frames the interactions in ways that suit the household members - and this often means practical and instrumental communication.

Connecting between the Cracks & Crevices of the Day

People make active choices about the kind of internet communication they will use based on how it will benefit them the most. Tammy, a partnered parent, describes her choice of email in contacting her husband:

Interviewer: Do you ever email your husband from [home]?

Tammy: Oh yeah.

Interviewer: Send a message to his work...?

Tammy: Yeah, and actually it's usually because when we're here, there's a thousand things going on and then the daytime comes: the girls are at school, he's out of the way, Adam's sleeping, and I think, "OK, we need to do this, this, this and this". So I'm not going to pick up the phone 'cause he's at work, and I don't want to do that. But, let me just send it so that way it's out of my head. I've communicated, and when we get together tonight, "oh yeah, that email you sent me." So I do email him frequently for that purpose.

Tammy describes a characteristically busy household with her husband and children. Importantly, she notes that she connects with her husband in a way that is not intrusive to his work environment - a typical affordance of email - quick and unobtrusive. But, the context is different than a work related email or a family chat because it is framed by their parental responsibilities.

Email as Household To-do List

Tammy's story also suggests something interesting about her choice of communication tool – her choice is based on an instrumental need and email helps her connect with her partner and get things done; email works as a reminder on a task list. This implies that not all of our communication is social and that our 'social interactions' are often shaped by things we need to get done. In many ways the social and the instrumental may overlap, but for those who use email for paid work (for example) can attest to emails that are task oriented and less about chatting. The same can be said for email communication

between spouses; interactions between spouses are often framed by their role as parent or partner and email permits them to carry out these roles and complete their domestic tasks. Here the social context of the communication is the household, the relationship between Tammy and her husband, and their role as parents. People are not simply 'household members', but instead they are part of a structure that is framed within roles (partner and/or parent) and relationships (husband/wife and/or mother/father) that people have with one another and to each other (women and men). Parenting responsibilities are characterized by motherhood and fatherhood – constructed social practices that reflect ideologies about gender, child rearing and self-identity (Collins 1994; Cowdry & Knudson-Martin 2005).

Situational Communication

Many of the connections between partnered parents throughout the day are contextualized within the needs of household members: children need to be picked up from school, they attend extra-curricular activities and they need to be taken care of when parents are at work. More connection is necessary because of their responsibility as parents.

Although these roles work to incite practical interactions, internet communication also allows people to just say hello and connect. Sometimes these social interactions are situational, as partnered parent Ruth explains her use of IM:

I think I did once to my niece in Australia and I was with my daughter and I asked Katie to do something, so I just went online and talked to Kristen and went back and forth with her. That was just a short time prior to when my daughter joined her in Australia

– kind of a situational thing. Which I find it nice: that we'll be flexible according to what's happening.

Ruth also talks about her email patterns, and these are also situational depending on where her spouse and children are:

Yeah, right now, I would love to say that since my son is in Vancouver, but that's kind of slacked off a bit, it comes in bits and spurts. So I would say it really is again - situational; Katie is in Australia so when she was travelling especially, it was more email messages to her Hotmail site. When Chris was down in South America, that was heavy email use 'cause it wasn't always possible to catch each other. When Andrew's out in Vancouver, we'll talk because when he'll have his laptop. We will probably email him a lot more and we call him.

Ruth's email patterns to family members change depending on what is happening with them at the time.

Media-Multiplexity

Ruth's story also points to different ICT choices - the use of the landline in addition to emailing her son, depending on the situation and her needs. Her shaping of the domestic internet is also complemented by landline use. People use a variety of tools to connect with household members: landline, cell phone, email and sometimes instant messaging – in addition to face-to-face. They all have benefits that people use to reflect what Haythornthwaite & Wellman (1998) call 'media multiplexity' – using a variety of

communication tools to suit their needs depending on the situation and context (Hogan 2009). People are rarely only in one place throughout the day – either at home, the workplace or at school – and the places in between. While the landline once tethered us to our home locations, email and instant messaging allow multiple communication access points (whether at work, school or public locations such as cafes, libraries and community centres). Yet, email clearly provides benefits to family members, and Ruth’s experiences reflect how email can facilitate and foster her family relationships.

Creative Communication

Some people use these online communication tools in socially creative ways with family members. For example, single father James is one of the few single parents who regularly emails and IMs his son. His son especially enjoys IMing with his Dad because he loves sending Yahoo’s “emoticons” to him. James and his son often IM each other when they home together, but in separate rooms because they find it so enjoyable. James’ story makes an important point: he and his son enjoy the interaction because it provides the benefit of fun moments and bonding in a different and creative manner. Communication tools are much more dynamic than they once were and they offer much more to users, allowing people to shape their internet use for their own needs and contexts. Sally unpacks her online communication, and best describes the context in layers:

Interviewer: So a lot of your emailing is
catching up with family and planning...

Sally: Yah, planning things with friends, and
then I guess the third level would be

communicating something to do with my kids,
whether it's the sports activities or whatever.

Sally's insight into her own online communication patterns from home is perceptive. She understands the different kinds of online interactions she has and how these fit with the different social roles she plays.

Summary

The discussion throughout this chapter was framed by my research question at the beginning of this chapter: *in what ways do paid work, immigrant status and household composition shape internet communication from home?* This chapter further investigated the social character of the household internet to explore how different kinds of practices - framed by paid work, immigrant status and household composition - can shape the home internet – and work to shape online communication from home. Home communication by East York participants, in conjunction with the previous chapter about internet acquisition, sheds additional light on how people actively shape internet domestication.

The survey findings do not yield any significant differences in the average number of hours spent communicating online from home when looking at household composition and home-workers. Immigrant status reveals that non-Canadian born respondents spend more hours communicating online from home, and this makes sense given the role of the internet in facilitating long-distance relationships (Ros 2008; Cheong & Poon 2009).

The number of hours women and men spend is comparable, which seemingly contradicts studies that show women communicating online more. Yet looking more closely, results do show that single adult females and female full-time home-workers spend the most

number of hours communicating from home, with immigrant women spending more time than immigrant men. As such, this would suggest that depending on the situation and context, women are communicating online more than men.

The number of hours spent online communicating from home, and the number of emails sent to household members, friends, relatives, and emails for work or school seems to situate the home as nexus for online interaction in varying capacities - contextual communication experiences. My analysis of the stories told in the interviews reveal different kinds of benefits of internet communication; for home-workers being able to communicating from home offers flexible work arrangements, with potential tensions when 'always-on' encroaches on family time. Within households, internet communication is not only social (to say hello and chat), but also instrumental. Sometimes emails between spouses are sent within the cracks and crevices of the day, as an unobtrusive reminder or update about family events and situations, or as a to-do list.

Immigrants make different choices about the kind of internet communication tool they use. Although different kinds of households and home-workers typically talk about the benefits of email, immigrants utilize instant messaging. The interviews reveal that IM is a better suited internet communication tool for their needs; immigrants are able to enhance their textual interactions with audio and video chatting options, and this allows them to share their daily experiences in a much more personal way. Immigrants use IM both synchronously and asynchronously depending on the situation, revealing the complexity of their home internet demands. The choice and use of IM by immigrants shows how people make active choices about the kind of internet communication they use framed by their own needs and the needs of their family members (both local and global).

Contributions

Internet communication research identifies patterns of use (broadly) but few offer contextual analysis from the ‘home as a hub’, to unpack what Rakow (1992) unravels in her landline research – stories from the standpoint of the user, and tales of how these devices become threaded into our everyday lives in different ways with different social and instrumental affordances. Little research unpacks the contextual character of these social affordances or examines how these benefits are sparked by one’s social world. For example, Boase’s research examines the use of email to maintain different types of network ties – strong and weak – arguing that people make active choices about the communication technologies they use (Wellman 2002; Boase et al. 2006; Rainie & Keeter 2006). However, Boase himself notes some limitations to his analysis: these particular social affordances are limited to PC email (not cell phone) and they are not cross-nationally generalizable. He notes that although the social affordances of PC email are conceptually the same for Japanese users, they use cell phones to connect with their strong ties more so than PC email – contrary to the United States (Boase & Wellman 2006; Boase et al. 2006). Little is understood about why this might be the case.

As such, while the internet has the potential to provide broad affordances to people, not everyone will utilize the benefits or perceive them in the same way. Yet, despite the focus on social contexts of the affordances, very little research addresses exactly what these social contexts look like or how an affordance might manifest within these social worlds. While there is a sense of what the technological affordances of internet communication are (Wellman et al. 2003), there is less understanding of how these attributes play out in today’s households or their significance.

Here, my research contributes to the contextual gap that exists in Canadian home internet research. I argue that while the internet may provide different benefits and constraints for people, these benefits and constraints are structured and contextualized by different practices framed by work, culture, and the people living in their household. For example, the experiences of home-workers suggest that while the benefits of using the home internet to communicate from home are obvious, there are also instances where these affordances can help blur the boundaries between home and work spaces – with sometimes contested outcomes.

Furthermore, looking at immigrant status suggests that Non-Canadian born participants take advantage of other types of internet communication, such as IM and video chats, to complement and enhance their conversations with friends and family far away. The immediacy and added intimacy of these audio and visual chats, plays an important role in fostering long distance relationships. Moreover, looking more closely at household composition suggests that emailing from home is also often framed by the needs of family members. Here, household members not only connect to say hello when they are apart, but they also use email instrumentally for household tasks that need to be done and to facilitate various household schedules.

Comparably, the use of the home internet to communicate clearly shows the shared need to connect with others, and the use and flexibility of the internet. In each of these different circumstances, people use online communication from home to bridge the barriers of physical distance: full-time home-workers are more removed from the physical workplace and use email most often to connect with work and their own social circle; Non-Canadian born participants are away from close friends and family in their home countries and

incorporate IM use into their day to share important life moments (or the everyday mundane); partners and parents are apart throughout the day as they attend to their own schedules and use email to keep the flow of the household routine going. The different contexts of work, immigrant status, and household reveal different frameworks that shape home internet communication, yet in each circumstance there are varying needs and expectations. Therefore, we cannot simply generalize or over simplify home internet communication because of the varying circumstances and diverse social worlds that people live in.

The following chapter further investigates the social shaping of internet domestication, and focuses primarily on information seeking online. I continue to explore the social character of domesticating the household internet, and how a domestic internet is socially shaped by different contexts and practices. I investigate information seeking via the internet specifically, and analyze the kind of information sought amongst East York respondents to further investigate how people shape their domestic internet in different ways.

Chapter Five: *Information Seeking: Road Trips from Home*

Introduction

It is sometimes hard for me to imagine how I managed to find and access information before the internet came to my home in 1995. Much of the information that came to me via paper (newspapers, take out menus, magazines, phone books) have been replaced by quick *Google* searches. As a mother, looking for information online has always been vital to me. When my son had epilepsy as a young child, I frequently turned to the internet to gather as much information as I could about it, which in turn often provided me with peace of mind and hope and importantly, these online searches informed my decision not to medicate my child (this turned out to be a good thing). Doctors could not always provide me with the information I wanted and certainly not the immediacy of which I needed the information. Beyond the hours spent looking for health information (both for my son and myself), my information searches connect to much of my household life; recipes, travel plans with my son, school calendars, boy scout badges, homework and more. In one situation, the washing machine breaks down and because I cannot afford a service call, I look up the model online, learn about possible problems, find the problem and fix it myself. The internet provides the benefit of instrumental affordances that allow me to search for information that is quick and relevant to me; I find information to take care of a household problem myself that otherwise would have cost me money in repair fees. My immediate social world shapes the kind of information I look for online; my role as mother, homemaker and paid home worker frame information seeking patterns, and in turn shaping the way the household internet is domesticated into my home.

In the preceding chapters I discussed how home internet acquisition and online communication are shaped by practices framed by paid work, immigrant status and household composition. Each aspect shapes a particular experience of internet domestication. In this chapter, I focus on information seeking patterns and the kinds of things people search for online from home; people also use the internet to look for information that is relevant to them. I ask: *in what ways do paid work, immigrant status and household composition shape online information searches from home?* It is my expectation that people will search for different things online depending on their needs of their immediate social world; I expect to see how different aspects of one's social world manifest in the kinds of things people search for online from home – from health information, to government information, to cultural heritage and more.

My discussion begins with a background discussion of information seeking online, and some of the types of searching people commonly do, noting that the literature point to different patterns of use across the population. I then discuss the survey findings, looking at how long people spend looking for information online, and a detailed look into the kinds of things they look for. The discussion of the interview excerpts reveals different practices that shape online searching, and the meaning and significance of this information in their lives.

Information Seeking Online

Information seeking is a key use of the internet for most people, in addition to communication, commerce and leisure activities online. However, not all people use the internet to search for information in similar frequency. As noted, early digital divide research addresses concerns about internet access that are typically framed by demographic

differences; gender, race and ethnicity, socio-economic status, age and education (Shade & We 1993; Loges & Jung 2001; Fox 2004; Moss & Mitra 1998; Ebo 1998; Rainie 2000; Hoffman & Novak 1998).

The Information Divide

In the early years of the household internet, women, non-whites, older adults, and those with lower income and less education had less access to the internet and therefore used it less. Some of these disparities (such as gender) have disappeared over the years as access became easier, less expensive and more pervasive in work and educational environments. However, there are still some subtle differences in terms of access and use: although digital divides in income, age and education have eroded, low income, older adults and those with less formal education still report slightly less internet use than others (Statistics Canada 2009). Moreover, while the gender divide in terms of access has disappeared, research shows that the amount of time women and men spend online searching for information is still different: men spend more time online looking for information than women do, whereas women are more apt to communicate online and maintain relationships than men (Jackson et al. 2001a; Kennedy, Wellman & Klement 2003; Fallows 2008).

Today, the discussions concerning barriers to internet access and use consider additional factors like geography: broadband access continues to be an issue in rural communities while many under developed countries have no access to computers, telephones or electricity (LaRose et al. 2007; Fuchs & Horak 2008). Discussions concerning digital divides have also moved beyond the demographic differences in internet access and use to more broadly consider their significance and meaning. For example, level of education is

noted a significant predictor of the level of internet skills people possess; basic literacy continues to be problem in North America and some lack adequate technological skills to effectively use the internet to search for information (Hargittai 2002; 2006). Low literacy levels affect the ability to not only retrieve the correct information, but also to read and understand it, whereas digital skills encompass web navigation and keyword searches that can be hindered due to inexperience online. Online experience is much easier to gain through trial and error and learned habits, whereas literacy level might be somewhat harder to overcome. Importantly, Hargitatti's studies point to the complexity of assessing barriers to internet use and how it is important to move beyond standard demographics to consider additional social factors that can constrain and ultimately shape how the home internet is used.

Search Topics

The kind of information that is available on the internet is incredibly vast; any topic, hobby, news article, research area, ailment, product and so forth can be found online. As such, people's information searches can vary greatly because they have different interests, motivations or needs that lead them to go online to look for pertinent information. And, not all information searches are instrumental; people often browse web pages for fun and entertainment, and as a leisure activity (Nie 2005; Statistics Canada 2009; Fox 2004). Canadians search for all different kinds of information online, such as government information, travel information, weather reports and road conditions, and family history and parenting (Statistics Canada 2009). Similar patterns exist in the United States: getting the weather report, getting news, looking up phone numbers, addresses or zip codes, checking

sports scores, and getting a map or driving instructions are the most popular online search activities by Americans (Fallows 2004; 2008). These studies suggest different types of online information searches that are framed within one's immediate social world, particularly the home.

Situated Searching

These types of information searches also reflect the embeddedness of the internet into people's everyday lives. These 'everyday' or ordinary types of online search activities are framed by a social world, and this varies from person to person and household to household. For example, noticeable differences in the kind of information sought online are suggested between women and men, and these appear to reflect typically gendered behaviour: women seek health and religious information online more often than men do, whereas men search for news, sports and information about products and services more than women do (Shade 2004; Fox 2006; 2008; Pastore 2001; Nie 2005). These studies are important because they suggest that people's online search patterns are driven by their social world. However, in probing gender differences in online information seeking, it is important to contextualize these differences in the locale it is taking place, and this is not the case in most studies. Almost three-quarters (73%) of Canadian home internet users seek information about family and parenting online – information needs that are taking place inside the home by individuals with specific roles and relationships within it (Statistics Canada 2009). Women typically search online for health information more often than men do, however the context is important: often these online health information searches are for partners, children, and other family members in addition to for themselves (Fox & Rainie 2002; Fox & Jones 2009). This

suggests that women's role as primary caregiver might also be reflected in the kinds of information they seek online (Miyata 2002; Bakardjieva & Smith 2001).

Additional contexts of one's social world should also be considered when examining the social shaping of the household internet and the kinds of things that contribute to its pervasiveness. Research points to the importance of race and ethnicity in information seeking patterns. For example, African-Americans typically search online for instrumental information such as educational research, employment, health information, and religious and spiritual information more often than white Americans (Spooner & Rainie 2000; Smith 2010a). African Americans use the internet to search for information that is pertinent to their social reality and these searches may reflect their lack of access to educational opportunities, health care, and employment opportunities. US Hispanics also remain digitally disadvantaged compared to other ethnicities, as their access, use and integration remains low (Spooner & Rainie 2002). These varying online search patterns between visible minorities support a social shaping approach and challenges deterministic claims that assert the generalizability of home internet use. Race, ethnicity and heritage provide additional contexts to consider when examining internet domestication.

Because visible minority research in the United States suggests different kinds of online search behaviours, it is a useful social characteristic to explore in East York. As described in chapter two, Toronto is a rich hub of diverse cultures; the diversity of heritage in Canadian born people and the growing number of Canadian immigrants in Toronto lends itself to a multi-cultural nexus. For immigrants, the internet has facilitated relationships with friends and family in home countries via email, IM and video chat (Dechief et al. 2008; Katz 2010; see chapter four). The internet is also an invaluable source of information to aid new

Canadian immigrants; searching for employment opportunities, ESL classes, Canadian cultural traditions, or even transit information are searches characterized by their social world (Salaff 2003; 2004).

Previous research about online information searching suggests a social relationship with the internet; people play an active role in how the internet is used for information gain in their everyday lives and their needs are shaped by their immediate social world. However, to date there are few Canadian studies that have investigated people's online search behaviours, and even fewer within the context of the home. As such, my research seeks to further characterize the social world shaping online information seeking from home, which will lead to a better understanding about the interrelated social practices at play in shaping the domestic internet.

Survey Results & Findings

Online Information Searches from Home

The internet is used to search for many different topics; the plethora of information available online (from legitimate sources to stories and reviews shared by other internet users) allows people access to unanswered questions and research of things of interest, concern or necessity. Where library, newspapers, medical journals, books, user guides and so forth were once primary sources of information people (in addition to utilizing the social capital in one's network), the internet has offered ease, convenience and access to whatever information people need.

Hours Spent Searching Online for Information

This bountiful information vat (in addition to communication affordances) provides additional benefits for home-workers. Although the survey data do not reveal any significant differences between home-workers (see Table 5.1), over-timers spend the least number of hours searching for general (2.1 hours) and product information (1.1 hours) online from home. Part-timers spend the most number of hours searching for general information, a mean of 3.4 hours per week – about an hour more than over-timers (2.1 hrs) and full-timers (2.6 hours). Full-timers spend slightly more times looking for product information (1.9 hours) than part-timers (1.7 hours) and over-timers (1.1 hours). Overall, home-workers spend a mean of about an hour per week looking for health information.

There are some interesting differences (although not statistically significant) between male and female home-workers. Men who work at home spend more hours searching for general information (3.1 hours) than women who work at home do (1.9 hours). The part-time men are particularly noteworthy, spending a mean of 6.5 hours per week looking for general information online. They also spend the most number of hours looking for product and health information. Because of the category of general information is rather broad, the nature of the information or topic is not clear. These differences could be related to different kinds of occupation, or simply time available.

The mean number of hours spent searching for online information from home is, however, significantly different between Canadian born and immigrant respondents; immigrants spend on average about an hour more per week (3.8 hours) searching for general information than Canadian born respondents (2.4 hours) do, and they spend slightly more time looking for product information ($p=.02$). This hints at the importance of the internet for

Canadian immigrants in finding pertinent information, and calls for further investigation about the kind of information they are looking for. Immigrant men spend the most number of hours looking for general and product information online, whereas immigrant women spend the least.

Looking for health information online is consistent at average of one hour per week across household types, home-workers and immigrant status.

Households also differ in how much time they spend online searching for information and what they are searching for. For example, single parents spend the most number of hours searching for general information (a mean of 3.6 hours per week), whereas partnered parents spend the least time (a mean of 2.9 hours per week). Those living alone spend slightly more hours per week searching for product information (a mean of 1.9 hours per week), and single parents spend the most time searching for health information (a mean of 1.3 hours per week). Partnered participants (with and without children) spend slightly less time looking for information, whereas single participants are spending the most time online. One could speculate several reasons for this: partnered parents have less time available to search online because of the added responsibility of children, or single adults might lean on the internet more in absence of other household members. It appears then that people's information seeking needs vary depending on their household composition, suggesting contextual internet searching.

There appear to be two groups of power searchers: single mothers and single men without children. Single men without children spend the most number of hours online searching for general information, with partnered men (without children) spending the most number of hours searching for product information. Single mothers spend the most number

of hours searching for health information (a mean of 1.6 hours per week), which is also typical of previous research – but none of the health searches reveal significant relationships.

On average, men spend more significantly ($p=.01$) time searching for general information than women do; men spend a mean of 3.8 hours per week, compared to women who spend a mean of 2.5 hours per week. Men also spend slightly more time (also significant at $p=.02$) searching for product information: men spend a mean of 1.9 hours per week searching for product information compared to women who spend a mean of 1.2 hours per week. These results appear to support arguments that men are the information seekers, with some unclear results concerning health seeking patterns. These data also suggest some gendered behaviours when searching for online information from home.

Table 5.1: Mean Number of Hours Per Week Spent Seeking Online Information from Home

		General Info	Product Info	Health Info				General Info	Product Info	Health Info				General Info	Product Info	Health Info
Household Composition					Home-workers	General Info	Product Info	Health Info	Immigrant Status							
Men	Partnered Parents n=39	3.2	1.2	1.1	Over-timers n=19	2.4	1.2	<1	Not born in Canada n=53	4.8	2.4	1.0				
	Partnered Couples n=26	4.3	2.9	<1	Part-Timers n=8	6.5	2.7	2.0	Born in Canada n=51	2.8	1.5	1.0				
	Single Parents n=4	1.8	2.0	0.0	Full-Timers n=12	2.6	1.2	<1	Total n=104	3.8	1.9	1.0				
	Single Adults n=8	4.9	1.3	1.3	Total n= 39	3.1	1.4	1.0								
	Living Alone n=27	4.2	2.7	1.1												
	Total n=103	3.8	1.9	1.0												
Women	Partnered Parents n=51	2.6	1.4	1.0	Over-timers n=15	1.6	1.0	1.0	Not born in Canada n=62	2.8	1.2	1.0				
	Partnered Couples n=30	1.9	1.0	1.0	Part-Timers n=11	1.6	1.2	<1	Born in Canada n=63	2.2	1.1	1.0				
	Single Parents n=16	4.0	1.6	1.6	Full-Timers n=11	2.7	2.7	1.4	Total n=125	2.5	1.2	1.0				
	Single Adults n=11	2.3	1.0	1.0	Total n=37	1.9	1.5	1.0								
	Living Alone n=15	1.5	<1	<1												
	Total n=123	2.5	1.2	1.0												
Total	Partnered Parents n=90	2.9	1.3	1.0	Over-timers n=34	2.1	1.1	1.0	Not born in Canada n=115	3.8	1.8	1.0				
	Partnered Couples n=55	3.0	1.5	1.0	Part-Timers n=19	3.4	1.7	1.0	Born in Canada n=114	2.4	1.3	1.0				
	Single Parents n=20	3.6	1.7	1.3	Full-Timers n=23	2.6	1.9	1.0	Total n=229	3.1*	1.5*	1.0				
	Single Adults n=19	3.4	1.1	1.0	Total n=76	2.5	1.5	1.0								
	Living Alone n=42	3.3	1.9	1.0												
	Total n=226	3.1*	1.5*	1.0												

* $p < .05$; ** $p < 0.10$

What are People looking for?

Looking at women and men broadly may reveal some gendered differences, but situating these practices within the household tells us much more about the time they spend searching online and the motivations behind the different kinds of information they are looking for. Again, the interview questions give more depth and context to the initial survey questions – specifically the kind of general information they are looking for. In addition to coding interview passages, online search topics discussed during the interview were coded by keywords and tallied by occurrences (see Table 5.2). Most noticeably, the top search topics for women are health and travel information, and for men it is news, local and travel information. Therefore, although it appears in the survey data that women and men spend about the same number of hours searching for online health information, the interviews suggest the importance or relevance of this type of search topic to women. Moreover, this might also suggest different search patterns: spending short sessions searching but frequently, or longer search sessions on fewer health topics. Furthermore, there are also other search differences between women and men: men search for technology and sports information whereas women do not, and women search for real estate information whereas men do not. These search differences further suggest contextual shaping of internet domestication, and also support gendered search practices argued by previous research.

Table 5.2: Information Search Occurrences by Gender and Immigrant Status

Type of Information	Women	Men	Cdn Born	Immigrants
books	4	2	2	4
education	3	4	5	2
entertainment	7	6	7	5
factual	6	3	5	3
family	3	1	3	0
financial	5	6	6	5
government	1	6	4	3
health	22	4	14	12
heritage	5	6	1	10
hobbies	6	6	6	6
household	3	2	4	0
jobs	4	4	2	6
local	9	7	6	10
news	9	9	5	13
pets	3	0	3	0
products	4	6	6	6
real estate	4	0	3	1
recipes	2	1	1	2
restaurants	1	2	3	0
spirituality	2	2	2	2
sports	0	4	2	2
technology	0	5	2	3
travel	14	7	13	8
weather	2	1	3	0
work	6	4	7	3
<i>n=</i>	39	29	33	34

Discussion: Putting Information to Use

People use the internet as an information resource from their homes, and their search topics are not only subjects that are pertinent to their own lives, but also those they live with (Rieh 2004; Savolainen 1995). However, simply reporting and describing the time spent searching online for information does not really provide much contextual detail about the type of information people are looking for, as noted. Here, the stories told during the interviews are beneficial because they offer this context.

Although most of the home-workers use the home internet in some capacity to communicate for work reasons, not all home-workers use (or require) the home internet for information searches. This is partially because of the different occupations held by home-workers (see Table 2.2); not all jobs require online information searches from home. For example, full-time guitar maker Sean notes that he does not really have a need to search online for anything related to his profession. Others - like over-timer Sally – use the home internet to search for web projects for her students, and over-timer Vamos uses the home internet to extensively research his video documentaries. Conducting work related research is most often noted by home-workers, and this is not surprising. But, the searches are contextual and contingent on the type of work they do and how much they work at home; the searches range from intensive academic or medical research, government census information to background investigating companies and clients.

Using Information to Feel Connected

Online information seeking by immigrant interview participants also suggest contextual home internet searches, and provide some understanding about why they spend

more time online looking for information. The internet provides material that is not only informational (such government forms or policy websites) but also information about North American culture. Nayra comments on her interest in North American politics and news:

When it was a new life here it was relations in Canada or relations in USA. So I was very much curious about that, to find out things from there. I spend my time to get news and to get some information from my field. A little bit of election information.

Online searches are also framed by maintaining a connection with their home culture. For example, Nora, a married woman from Pakistan, reads the news online about her home country and stays connected to current entertainment:

I listen to songs and Pakistani dramas, serials - it's a website, like music.net. They have most of the latest dramas and drama serials. So, I can watch them whenever I have time, one or two times in a month. So I watch songs and see the dramas, and read Pakistani newspaper. But my husband does this everyday - read Pakistani newspaper.

This practice is supported by previous research (Alonso & Oiarzabal 2010; Yang 2003; Chen 2010), and is shared among recent immigrants in East York: Petra goes online to read the headlines in Bulgaria, and Malcolm goes online during the Islamic month of Muharram to fulfill his religious duties by listening to Muslim scholars speak. Malcom integrates his cultural and religious practices with online information seeking, shaping the domestication of the internet in a contextual specific way that suits his social world.

Information is Social

The cultural information that people look for online from home is also shared with family members. For example, recall James from the previous chapter who IMs with his son. He also goes online to satisfy his Canadian-born son's curiosity about his father's country of origin:

I'm originally from Jamaica, so there were times when my son was curious about certain things and I didn't know anyone who would have this information. So, I could get it online.

Here, James' search is not only shaped by his culture, but also by his son's curiosity about his heritage (and may also point to the lack of a local network enclave). Similarly, Hannah also shares the information she finds online, but she shares it with people outside her home. She discusses how her online searching of product information in her home country is passed along to her now long distance friends:

It's a Jamaican based newspaper: *The Observer*. What's happening there: I check their national website because it's different companies and [I] see who's offering what. Not that I can do anything, but it's good to know really. People keep calling me "Hey Hannah, how can I get so and so".

Hannah not only keeps up to date with her country of origin, but she maintains her social connections in Jamaica by sharing information with them that is of interest to her and of use to her friends. Her online searches from home are shaped by her culture, her interests and the interests of her friends, but importantly her home searching shows how instrumental searching can move to the social when it shared with others inside and outside of the home.

Heritage & Genealogy

Immigrant participants who have been in Canada for many years also stay connected to their cultural heritage by searching online information, as 55 year old John – who came from England when he was a child - notes:

I have bookmarked some newspapers from Britain that I look at, not on the regular basis, but on an infrequent, sporadic basis to see what's happening. I've got them geographically, so I've got one in Ireland and one in Scotland. I looked at the Guardian because I like it, it's a good paper. And I look at newspapers in the cities where I have relatives. So I'm aware about what is happening around there.

Winston from Nigeria also uses the internet to stay culturally connected to his home country:

It's basically to keep just to have an idea of what's going on back home and every city has different news and stuff. Major cities that are in different provinces are very city specific, not like the Global news we have here it covers the whole of Canada. It doesn't work like that over there. It's really city specific so of course it's not all the news in detail, but it gives you a general idea of what is happening and stuff.

These examples from the interviews suggest another important consideration when exploring the shaping of the domestic internet – immigrant status. Here, being an immigrant shapes the type of information people look for online from home.

Even the online searches of Canadian born participants suggest how interest in one's background, culture or heritage can frame their internet searches. Dana has an interest in learning more about her cultural heritage, and this shapes how she uses the internet as an information source:

Well, my background is French-Canadian and my father's family comes from Manitoba, so right away there is Métis, so I've been trying to search through the Canadian archives in Ottawa. You can go certain distance in there and you have to actually go there, physically. So I have searched for the (*family name*) family various places in Canada and what-not and in Quebec.

Dana's interest in her family's history shapes the kinds of the things she looks for online, and she uses the internet as an investigative tool to discover things about her Canadian heritage. This parallels immigrants who also use the internet to search for information about their heritage and cultural background. These examples offer additional support to a social domestication process that can be different from person to person and household to household depending on context.

Discussion: Road Trips from Home

Online searches from home are conducted for work or school information, and even things of personal interests (culture, health, hobbies or travel). Yet the interviews also suggest that much of the information people search for at home is shaped by the presence of other household members.

Domestic Information

Real estate, movie reviews, and travel plans are common search topics in partnered households. Patty, who does not have children, describes how she made vacation plans online for herself and her husband:

We took a vacation in September, and I was online a lot, looking at: “Oh where should we go?” So, we were thinking Prince Edward Island, right? So, I was looking for different websites on Prince Edward Island; where we could stay, and stuff like that. We ended up going to Montreal, but I did actually find the place where we stayed online.

Patty and her husband used the internet to find information so that they could plan their vacation together, and they did this rather than going to a travel agency, picking up brochures and making arrangements by more traditional means.

Situations will often surface in households where participants turn to the internet for speedy information, from termite infestations to purchasing household items. Perry (married) talks about online research he conducts for household items before buying them from the store: “I don’t do any shopping online at all. But, I’ll look up stuff for like when I was doing research to buy the new fridge or washing machine, I did some research online”. Perry uses the internet to research topics that are relevant to his immediate social world, suggesting how Perry integrates the internet into his home.

Information for Parents

Children in the household also shape the type of information parents search for online, and this can range from health (see next section), homework or extra-curricular activities. Single father Alex describes different search engines to help his son with his homework: “I usually *Google* very often. I think it’s becoming a fairly fast search engine. When helping my son with his homework, we have used *Ask Jeeves* a fair bit because sometimes it comes up with slightly different sorts of topics”.³² Interview participants with children also search for information about their children’s extra-curricular activities, as Helen did for her son:

I use the website to find hockey camps for my son. Toronto and, there’s a great hockey camp up around North Bay, and there’s one in Haliburton, so there’s a lot. There’s a very good one out in Mississauga as well, so there are various sites in Ontario that I looked at.

Planning the week can be challenging with children, and parents use the internet to help them plan and schedule children’s activities. Tammy uses the internet to do so:

My girls do swimming lessons at the local pool, so I use the internet to check out time schedules to sign them up for that. We’re now in the process of looking at registering them for school, so I quickly went on the Toronto District School Board website yesterday just to find out which schools were open for options and that sort of thing.

³²In chapter two I noted the temporal context of my case study. Here is an example of a moment captured in home internet history.

Similarly, Sally describes how the internet helps keep her informed of her children's sports organizations:

Interviewer: What kind of things do you look for?

Sally: Well, a lot of it's online because the sports organizations that our kids are in are all online, so you can find results and information about upcoming meets, schedules; you know - they usually have a website, with a newsletter, posting anything regarding the sport. [It] will be online so you can go to their website to keep in touch with the organizers.

These examples suggest that the internet not only provides speedy and simple access to information whenever people need it, but that much of what people search for is shaped by the people around them - household members. Online searches are not always for oneself, but also for their husbands, boyfriends, sons and daughter – and even things to do with the home itself such repairs or purchasing new products.

Gendering Information Seeking from Home

In chapter four I discuss how communication between partnered parents throughout the day is contextualized within the needs of children and spouses, and how women – as primary caregivers - connect with their children more often than men do. Online information seeking patterns from home suggest a similar phenomenon framed by gender roles in the home. Home searches not only vary between households but there are also differences between women and men, and these differences appear to be shaped by gender roles that are tied to the domestic responsibilities of the household. Kent, a married parent, notes how his

online searches are different than his wife's searches: "I might use it for maps, I might use it for hotel accommodation, but she'll use it for food, recipes, health information". Kent's personal example is also consistent with previous research about the online search patterns of women and men.

Some of these online searches are framed by the people who live with us (household composition), as previously discussed; with children living at home, parents search online for hockey camps, swim schedules and so forth. These responsibilities and needs shape what people search for online from home. Other online searches are framed by domestic roles and the chores they encompass. For women, the domestic chores they are responsible for also shape their online information searches. For example, the ease of information access and the domestic responsibility of cooking for household members shape what women search for online. Partnered parent Olivia talks about how she often uses the internet for recipes:

I got round steaks, so I'll look up recipes for round steak in the slow cooker, or you know chicken or whatever. I do that almost on a daily basis, you know, get ideas about what am I going to make for supper tonight.

When wife and mother Tammy is asked what she searches for online, she tells a similar story: "Sometimes recipes. I'll think: what can I do with this 'whatever'? So, I'll go and work out something. I'll type in keyword 'asparagus' and 5,000 things come up!".

Single mother Hannah suggests that not only do online searches provide easy access to recipes, but these searches are also shaped by her concerns that her family is eating healthy. She searches for: "How to eat and feed a family properly; how to maintain optimum health; what foods harm you, what foods heal you." Compared to general information and

product information, survey respondents spent the least number of hours searching online for health information, yet the interviews suggest the role and importance of using the home internet to search for health information.

Dr. Spock Goes Digital

Parents search for online health information for their children, telling of how domestic responsibilities within the home – childcare provider – can shape online searches. Stephanie’s story is an interesting starting point, as she describes how her online information searches relate directly to pregnancy, motherhood and parenting – her role of mother in her home:

Stephanie: well, when [my daughter] was first born, I guess I was pretty paranoid. So I looked up everything that could go wrong and read about everything so I’d know warning signs if anything was happening.

Interviewer: Can you tell me more about that?

Stephanie: Well you get [information] when you’re pregnant; they send you a lot of stuff in the mail telling you about different things. So, I guess that’s what kind of got me paranoid, you know? What if something’s wrong and I don’t know. So, I thought I’d type in different things that are more common and...just so I know the warning signs if anything were to come up with her.

Stephanie’s concerns about pregnancy framed the type of information she looked for online, and she also used the internet to follow up on information she received from other sources.

With such easy and quick access to information, people can effortlessly find needed situational information: “Whatever might pop-up in terms of being wrong with a family member and you want to explore that, find out more about it” (Debbie, Partnered Parent).

Knowledge Shifts

The ease and convenience of online searching certainly contributes to its increased pervasiveness in the home, especially when some health concerns are immediate. Prue describes a health incident with her daughter:

Madison had this rash (and I wish I could remember what it was called). It’s all in the same family as chicken pox, this really bad rash. And I remember asking someone about it and they said: “check online about the symptoms of it.” And so, when I called up the doctor, I remember saying, “I think she has this”. I can’t even remember now, it’s like two years ago. Oh my Lord. It was these big, blotchy rashes all over her body.

With the internet in the home, there is easy access at any time of day or night to information people need – whether for themselves or those close to them. Heading off to a hospital emergency room, calling Tele-health, or waiting until morning to attend a health clinic can often be circumvented (or made more pressing) with such immediate online information. Gerry (a partnered mother) shares her story and also notes the importance of immediacy when looking for information online: “I looked up ‘flu shot side effects’ in the fall because my daughter was experiencing symptoms the night that she had the flu shot”. Online health searches not only provide answers to situational sicknesses, but also allows for follow up

information, such as when medications are prescribed by doctors. Prue continues her online health information seeking story:

Medications - I will look up info on medications. So, if I've been prescribed (or the kids), if there's something I'm not familiar about, or I want to know more about the side-effects or whatever, I'll go [online].

Partnered Tammy's online health searches are similarly shaped by her parental role:

I'll look up health information. So, a few weeks ago one of our daughters was suspected of having mono - so I went on healthyontario.com and went: "oh yeah, those symptoms, blah blah blah". So I look up that sort of thing.

In addition to immediate health concerns, information about more acute or chronic illness is also sought after. Partnered Sally explains the importance of being informed about her family's medical conditions in addition to her own:

My son at one point had this rare disease and my daughter was diagnosed with a bicuspid aortic valve, and I wanted to find out more information on that. Or, I have heart arrhythmia and I'm just trying to find out a test, you know, what do these tests mean? Why is the doctor ordering it? So, I'm a person who likes to have lots of information.

Sally's desire for information reflects a societal shift in knowledge transfer, and the increasing need for people to have access to the information they require. These interview examples suggest that internet as an information tool becomes increasingly integrated into

how people accumulate knowledge about pertinent health issues because of its availability, scope, and relevance to their immediate social world. Active online searching for health information informs the users and allows them to make informed (and sometimes different) decisions, which they share with both health care professionals, and their social networks (Berg 2011).

Although the survey data show that women and men spend about the same number of hours looking for health information, the interviews point to mothers primarily talking about the health information they seek online from home for their family members. It may be true that women seek more health information because they care for children, but this must be understood within a wider scope and context of the household, the people within it, the relationships they have with the people in their households

Summary

This chapter further investigates the social character of the household internet in order to explore how the domestic internet is socially shaped by various practices at play. I address my research question for this chapter – *in what ways do paid work, immigrant status and household composition shape online information searches from home?* In addition to the benefits of online communication, the internet provides seemingly unlimited amounts (and types) of information about any given topic. With ease, convenience and flexibility, people can easily and immediately satisfy any query online.

When looking at the survey findings for the number of hours spent searching for information online across households, home-workers and immigrants, there do not appear to be any glaring differences. They are all quite comparable. Here I have shown that my

categories of analyses within these groups reveal some further detail; the type of household, type of home-worker, immigrant status, and gender show differences in the amount of time spent looking for information, and what people are looking for is situated within their immediate social world.

While all household types are comparable broadly, looking at gender reveals that single men and single mothers spend the most number of hours looking for general information, and that male home-workers and male immigrants spend more hours looking for all types of information than women do. Health is the exception, as it is comparable across all different groups. However, the interviews illustrate the complexity of online health searches; pre-natal, parenting, illness, and disease are search areas by women that are framed by their immediate social world, and this context cannot be gleaned from survey data.

Contributions

The stories shared by interview participants reinforce the significance of recognizing social context and one's social reality in shaping home internet searches – and internet domestication. Previous research concerning online information seeking habits tend to look at patterns of use broadly (such as Race: Jackson et al. 2001b), but few take a closer look at how these searches came to be and where they stem from (Aspray & Hayes 2011; Momodu 2002; Clemens & Cushing). Some search topics are perhaps more situationally obvious than others (such as news and weather), where other search topics (such as health or general) are more challenging to unravel and require further probing (Nicholson et al. 2003; Nakamura 2004). Here, my research contributes to the contextual gap that exists in the research. I argue that the internet provides a useful platform for information searches, but these online search

patterns from home are framed and contextualized by different practices conditioned by work, immigrant status, and the people living in their household. For example, the online search patterns of home-workers are relative and contingent on the type of work they do and how much they work at home; the searches range from intensive academic or medical research, government census information to background investigating companies and clients.

My research contributes to our understanding of how immigrants experience and integrate the internet, and the transnational patterns of information seeking and sharing; immigrants look for online information about their home country to feel connected, to keep current, to learn new things, and sometimes to share the information they find with others, which supports previous research (Chen 2010; Wang et al. 2009; Elias & Lemish 2009; Pyati et al. 2008; Lim 2008). These examples – life situations – exemplify the contexts of people's online search patterns from home.

Households also differ in the kinds of information they look for online and because of the ease of accessibility to the information, people can search for topics that suit their personal needs and the needs of their family members. I suggest that these needs are often situated within family; searching for household product information, travel and vacation information, helping children with homework, or searching for health information to alleviate concerns for the well being of family members. These examples argue for the relevance of household composition – the presence of family members and the relationships between household members, such as mother and father or wife and husband – in the shaping of the domestic internet (Hynes 2009; Lim & Soon 2008).

These relationships, however, encompass roles and responsibilities within the family, and these are also shaped by gendered practices that are tied to domestic responsibilities of

the household: women and men look for different kinds of information online and this information reflects feminine and masculine roles; women search more often for health, real estate, and travel information, whereas men search technology, sports, news, local and travel information more often, and this supports previous research (Lim & Soon 2010; Jackson et al. 2001a; Jackson et al. 2008; Aspray & Hayes 2011). These differences suggest gendered practices within the home that frame online information searches and support an internet domestication process that is socially shaped.

The different contexts of work, immigrant status, and household reveal different frameworks that shape online information searches from home, yet in each circumstance there are varying needs, motivations and expectations. Therefore, we cannot simply generalize or over simplify these home queries because of the varying circumstances and diverse social worlds that people live in. The stories shared during the interviews provide more depth and contribute to our understanding of the kinds of things people look for online.

The following chapter further probes the shaping of the domestic internet and specifically investigates the shared use and integration of the household internet. I discuss how the household internet can not only be a solitary practice, but also a collective experience in the home. I consider how families are recreating leisure time in lieu of their busy schedules and how households are reconfiguring what it means to spend time together, and what role this plays in the domestication of the internet.

Chapter Six: Showing & Sharing - Webbing Together

Introduction

My life over the past ten years has been considerably busy with my graduate studies, teaching and research work, volunteer activities, parenting and running a household. Much of what I need to do takes place on the internet, and many of the social connections I maintain take place online. The day is full, yet my teenager and I spend considerable time online for school, work, social activities and leisure interests. One might think the amount of time we spend online cuts into the time we spend together, but this is not the case. In chapter four I note that my son and I communicate online while we are in the same household. Often he will send me a link to a gaming website or new videogame, a YouTube video, a funny picture or just something he finds interesting – he’s sharing online information with me and I do the same with him. Yet it goes beyond that because we often look at these things online together; my son and I, are at a shared computer screen (either his or mine) and visit websites, watch videos, and much more - together. These experiences of ‘showing and sharing’ with my son taught me that internet use does not have to be a solitary experience, that we want to share things we find online (whether something of interest or necessity) with others close to us, and we can certainly do that with home internet. It strengthened our relationship as mother and son, but as he grows into adulthood – our friendship - because we share things of interest and talk about them.

In previous chapters I recounted snippets of stories of how people actively shape the home internet, how this is contextualized by one’s social world and the different practices at play, and the role they play in it. Chapter five discusses the role practices, such as the paid work, immigrant status and household composition, play in shaping the type of information

people search for online. This chapter investigates how people use the internet as a way to share things of interest online and as a way to spend time together: *how have households domesticated the internet as a shared practice?* In thinking about how household domestication and the kinds of practices that shape this process, I expect to see varied aspects involved in domestication; an interplay of different kinds of practices within a changing home internet landscape.

The following discussion begins with an overview of current concerns regarding the modern family, how families have changed over the years and the concerns that have surfaced with respect to families and the home internet. My discussion then moves to the survey findings, which provide a descriptive overview of the time spent with family members. Framed by the interview data, I then discuss how families share screen time together, and how they have reconfigured their physical home spaces to incorporate the home internet.

Concerns about the Modern Family

In chapter one I discuss some of the changes in household composition that have transpired over the last thirty years: smaller families, more divorces and remarriages means the traditional nuclear families is less pervasive than ever before. I also discuss the increase in paid workplace demands and the decrease in leisure time: more paid work hours, less leisure time and a speeding up of family life as people go from task to task. The family is generally perceived as in crisis, which begs the question of what an ideal family situation may look like.

Looking back on social concerns about individuals, family, communities and society broadly, there is longstanding discussion about the decline of family and community and the role that technology plays in this decline. Similar comparisons about the nature of our current social relationships inside and outside the household can be drawn to traditional discussions about community and society that situate industrialization and individualism as components of this social decline (Weber 1958; Tonnies 1957; Durkheim 1933). For example, one of the key concerns that surfaces is that people are spending less time together face-to-face than in previous years. Putnam's (2000) *Bowling Alone* sparked considerable controversy and discussion about the decline of the family by stating that people are spending less time with their families and having dinner together less often with them than they did thirty years ago.

Temporal Lifestyle Changes

In some ways Putnam's assertions may not be far off. People are clearly busier and often feel pressed for time, rushed, and are continually multitasking throughout the day (Robinson & Godbey 1997; Williams 2002; Mattingly & Sayer 2006). Some argue that the ramifications of this modern hectic life-cycle have led to less time with their spouse and/or children (Turcotte 2007; Milkie et al. 2004) despite the fact that others claim that people are spending more time with friends and relatives (Robinson & Godbey 1997; Stalker 2005). Concern about social isolation and the time people have available for social relationships and changes (both negative and positive) in their relationships is a consistent theme across forty years of research on people, families, community and the social relationships individuals have inside and outside the household (Wellman 1985).

Moreover, not all time is spent the same. Because women still spend more hours doing domestic tasks and childcare, research notes that they have less leisure time available to them than men do (Kimmel & Connelly 2007; Aguiar & Hurst 2007; Roberts 2010). As such, because women are primarily responsible for domestic labour, they might have less time for home internet use. Mothers spend less time communicating and searching for information online than fathers do (Kennedy, Wellman & Klement 2003), reflecting how social contexts can shape how the home internet is used in different ways for women and men. For women, domestic tasks and childcare are still a primary responsibility, despite the increases in the amount of time men spend doing domestic work (housekeeping, cooking, shopping), and the decrease in time spent on household chores overall (Stalker 2005).

How people spend their time has changed, from the increase in the amount of time both men and women spend in leisure activities (voluntary associations, visiting friends and relatives, sports, entertainment, and media use including television and the recreational internet), to the decrease in time spent in personal care (sleeping, eating, personal relaxation) (Stalker 2005). Previous research suggests that both women and men with children at home spend less time talking on the phone, reading a newspaper, watching television and attending cultural events (Robinson & Godbey 1997). Therefore, it is wise to consider these social changes and how people's routines have developed over the years when thinking about the role of the internet in people's lives.

Deterministic Effects of the Home Internet

Recall discussions about the effects of television viewing on families (Winn 1977), or how television content may influence children and youth (Gerbner & Gross 1976; Cline,

Croft & Courier 1973; Eron 1982). These do not seem far off from discussions that surfaced about the internet and families. For example, spending less time with family members and friends has been attributed to internet (and cell phone) use in households, and some research goes so far as stating that families are in decline: because of increased household internet use, parents and children are spending less time together physically (Nie, Hillygus & Erbing 2002; Nie et al. 2004). Blaming the home internet for contributing to the decline of family or face-to-face time between people ignores the numerous other things that may be going on in people's lives, such as work load, volunteer and leisure activities, childcare and domestic work. These are legitimate things to consider when thinking about how busy people are, the time they have available for leisure and social activities, and the time they spend with family members.

Additional research points to similar deterministic arguments: heavy internet users are said to have less 'rich' social relationships with others, and that the relationships that people maintain online are not as 'close' as the ones they maintain face to face (Sanders et al. 2000; Kraut et al. 1998). Strangely, this assumes that people have no agency or control over who they communicate with and how they communicate with them. It paints a simplistic and negative picture of the internet and the people who use (and in some instances, require) these tools for social interaction. In other words, these claims do not legitimize the close relationships people have online, nor do the claims validate the internet as medium that complements physical relationships (Wellman & Gulia 1999; Baym 2010). Ultimately, the dismissal of the internet communication as genuine social interaction between people ignores new and dynamic ways of interacting, while at the same time reinforcing the necessity of physicality for social cohesion and closeness.

Other researchers have also refuted arguments that assert that internet use leads to social isolation and less family time (Mesch 2001; Gross 2004), arguing that not only do internet users have rich relationships online and offline, but that people are not socially isolated or spend less time together because of internet use (Orleans & Laney 2000; Kaiser Family Foundation 2003; Cole et al. 2000; Kennedy et al. 2008). Others affirm the benefits of cell phones, gaming consoles and the home internet, showing that the internet can provide new and different ways for families to spend time together (Mesch 2003; Kaiser Family Foundation 2003; Kiesler, Zdaniuk, Lundmark, & Kraut 2000). As Mesch (2006) notes, research concerning the effects of the internet on family life and social relationships within the family are mixed, but the largest gap in household internet research rests in the outcomes and implications of internet domestication.

Legitimizing the Virtual

Much of what the media purports and what some researchers argue not only situates relationships with others in a very physical way, but also frames relationships we have and how we experience them as quite monolithic and traditional. In other words, these traditional approaches to relationships and community do not legitimize non-physical relationships (created or maintained online), and they do not leave any room to think about or create new ways for relationships to flourish. Again, part of the problem stems from the lack of qualitative depth in the quantitative findings. As such, my contribution is two-fold: first, using the survey I examine some of the ways people spend their time, framed by paid work, immigrant status and household composition. Doing so helps to gain a descriptive understanding of how time is spent with others in different contexts. Second, I then explore

some instances of household internet use that address some of the social concerns about the internet and today's families, suggesting people use the internet for 'showing and sharing' (Kennedy 2007) opportunities based on varied needs and interests. This leads to new and different ways for family members to spend time together, and importantly, reframes notions of family time and space.

Survey Results & Findings

Face Time with Families

I first turn to the descriptive survey data, which suggest some differences in the time people spend together across different contexts (see Table 6.1). For example, although not statistically significant, full-time home-workers spend slightly more hours overall with their partner, a mean of 18 hours per week compared to part-timers (16.5 hours) and over-timers (17.6 hours), and again this makes sense because they are home for longer periods of time than other kinds of home-workers. Full-timers also spend slightly more time watching television and using the internet with their partner, but they spend fewer hours together doing recreational activities than other home-workers. Thus, there are some subtle differences. Immigrants and Canadian born participants are mostly comparable in terms of the time spend with their partner overall (a mean of about 17 hours), with immigrants watching slightly more television (5.8 hours) than Canadian born participants (4.6 hours).

More noticeably (and statistically significant) differences are between those born in Canada and those who were not born in Canada. Canadian born participants spend on average, almost two hour more per week with their partner (18.6 hours) than immigrant participants (16.1 hours; $p=.02$). Television viewing and shared home internet time are

comparable, but participants born in Canada on average spend significantly more hours together (9.4 hours) doing recreational activities than immigrants (6.9 hours; $p=.01$).

Within partnered households, the time spent with one's partner is comparable between partnered parents and partnered couples, with the exception of recreational activities; partnered couples spend on average almost two hours more per week (9.3 hours) doing recreational activities than partnered parents do (7.5 hours). It is not surprising that partnered couples spend more time doing recreational things than parents do; for parents there is likely simply less time available together for fun things because of the additional time demands and responsibilities that children impose.

Table 6.1: Mean number of hours spent with Partner

Household Composition	With Partner				Home-workers	Immigrant Status								
	Overall	TV	Recreation	Internet		Overall	TV	Recreation	Internet					
Partnered Parents	17.5	5.6	7.5	1.8	Over-timers	17.6	5.9	8.3	1.4	Not born in Canada	16.1	5.7	6.9	2.1
<i>n= 95</i>	<i>95</i>	<i>96</i>	<i>94</i>	<i>94</i>	<i>n= 22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>n= 76</i>	<i>76</i>	<i>74</i>	<i>74</i>	<i>74</i>
Partnered Couples	17	6.5	9.3	2	Part-Timers	16.5	4.3	9.3	1.8	Born in Canada	18.6	6.4	9.4	1.7
<i>n= 58</i>	<i>58</i>	<i>58</i>	<i>58</i>	<i>58</i>	<i>n= 16</i>	<i>16</i>	<i>16</i>	<i>16</i>	<i>16</i>	<i>n= 77</i>	<i>78</i>	<i>78</i>	<i>78</i>	<i>78</i>
Total	17.3	6.1	8.2**	1.9	Full-Timers	18.0	5.7	6.3	2.2	Total	17.3*	6.1	8.2*	1.9
<i>n= 153</i>	<i>153</i>	<i>154</i>	<i>152</i>	<i>152</i>	<i>n= 15</i>	<i>15</i>	<i>15</i>	<i>15</i>	<i>15</i>	<i>n= 153</i>	<i>154</i>	<i>152</i>	<i>152</i>	<i>152</i>
					Total	17.4	5.3	8.0	1.7					
					<i>n= 53</i>	<i>53</i>	<i>53</i>	<i>53</i>	<i>53</i>					

* $p < .05$; ** $p < 0.10$

Spending Time with Children

The survey data also show some differences across different contexts in the time participants spend with their children (see Table 6.2). Overall, full-timers spend on average, more hours per week with their children ($p=.04$). However home-workers are comparable in terms of the number of hours spent watching television, with full-timers spending the fewest number of hours doing recreational activities with their children compared to over-timers (9.6 hours) and part-timers (10.7 hours). But, full-timers spend on average more hours online with their children (a mean of 4.6 hours per week) than other home-workers. Of interest here (although surprisingly not statistically significant) are the full-time women who spend an average of 6.4 hours per week online with their children.

Table 6.2: Mean number of hours spent with Children Per week

Household Composition		Overall	TV	Recreation	Internet	Home-workers		Overall	TV	Recreation	Internet	Immigrant Status		Overall	TV	Recreation	Internet
<i>With Children</i>																	
Men	Partnered Parents	16.0	4.9	7.7	1.4	Over-timers	15.1	5.6	7.9	1.8	Not born in Canada	15.8	5.7	6.5	2.3		
	<i>n=</i>	41	42	42	41	<i>n=</i>	7	7	7	7	<i>n=</i>	22	23	23	22		
	Single Parents	14.5	4.3	7.8	4.3	Part-Timers	9.5	2.5	7.9	1.0	Born in Canada	15.9	3.9	9.0	1.0		
	<i>n=</i>	3	3	3	3	<i>n=</i>	4	4	4	4	<i>n=</i>	22	22	22	22		
Total	Total	15.9	4.8	7.7	1.6	Full-Timers	15.2	3.0	8.3	2.9	Total	15.9	4.8	7.7	1.6		
	<i>n=</i>	44	45	45	44	<i>n=</i>	6	6	6	6	<i>n=</i>	44	45	45	44		
	Total	13.8	3.9	8.0	1.8	Total	13.8	3.9	8.0	1.8	Total	13.8	3.9	8.0	1.8		
	<i>n=</i>	17	17	17	17	<i>n=</i>	17	17	17	17	<i>n=</i>	17	17	17	17		
Women	Partnered Parents	19.3	5.5	11.4	2.9	Over-timers	16.7	2.7	10.9	2.3	Not born in Canada	18.3	5.8	8.9	2.6		
	<i>n=</i>	53	54	53	52	<i>n=</i>	9	9	9	9	<i>n=</i>	38	38	37	35		
	Single Parents	16.4	5.5	7.0	3.4	Part-Timers	19.2	5.8	15.5	1.3	Born in Canada	18.9	5.1	12.0	3.4		
	<i>n=</i>	17	17	17	16	<i>n=</i>	6	6	6	6	<i>n=</i>	32	33	33	33		
Total	Total	18.6	5.5	10.3	3.0	Full-Timers	19.6	7.1	8.8	6.4	Total	18.6	5.5	10.0	3.0		
	<i>n=</i>	70	71	70	68	<i>n=</i>	7	7	7	7	<i>n=</i>	70	71	70	68		
	Total	18.3	4.9	10.7	3.3	Total	18.3	4.9	10.7	3.3	Total	18.3	4.9	10.7	3.3		
	<i>n=</i>	22	22	22	22	<i>n=</i>	22	22	22	22	<i>n=</i>	22	22	22	22		
Total	Partnered Parents	17.8	5.2	9.8	2.5	Over-timers	16.0	3.9	9.6	2.1	Not born in Canada	17.4	5.8	8.0	2.5		
	<i>n=</i>	94	96	95	93	<i>n=</i>	16	16	16	16	<i>n=</i>	60	61	60	57		
	Single Parents	16.1	5.3	7.1	3.5	Part-Timers	15.3	4.5	10.7	1.0	Born in Canada	17.7	4.6	10.8	2.4		
	<i>n=</i>	20	20	20	19	<i>n=</i>	10	10	10	10	<i>n=</i>	54	55	55	55		
Total	Total	17.5*	5.2	9.3*	2.5**	Full-Timers	17.6	5.2	8.6	4.6	Total	17.5*	5.2	9.3*	2.5**		
	<i>n=</i>	114	116	115	112	<i>n=</i>	13	13	13	13	<i>n=</i>	114	116	115	112		
	Total	16.3*	4.5	9.5	2.6	Total	16.3*	4.5	9.5	2.6	Total	16.3*	4.5	9.5	2.6		
	<i>n=</i>	39	39	39	39	<i>n=</i>	39	39	39	39	<i>n=</i>	39	39	39	39		

*p<.05; **p < 0.10

Canadian born participants spend on average almost three more hours per week (10.8 hours) doing recreational things with their children than immigrant participants (8.0 hours) – similar to the pattern with the time spent with one’s partner. Both groups spend on average about two and a half hours per week online with their children.

Partnered parents spend on average more hours overall (17.8 hours) with their children than single parents do (16.1 hours). Partnered parents also spend more hours with their children doing recreational things (9.8 hours) than single parents (7.1 hours). While television viewing with kids is comparable (about five hours per week) between parents, single parents spend on average one hour longer (3.5 hours) online with their kids than partnered parents do (2.5 hours).

Gendered Digital Parenting Practices

In general, the cross-tabulations indicate that there are some subtle differences in how much time people spend with household members on assorted activities. But further interesting differences are those between women and men and the number of hours they spend doing things with their children. In the households with home-workers, female full-timers spend the most number of hours a week overall with their children (19.6 hours) compared to full-time males (15.2 hours; $p=.04$), in addition to more television time: a mean of 7.1 hours per week compared to male full-timers who spend a mean of 3.0 hours per week. Again, full-time women also spend the most number of hours online with their children. While we might expect that full-time home-workers to spend more hours with their children because they spend more hours at home, the differences between males and females across

types of workers suggests that women's position of primary caregiver might partially account for and explain the reason behind differing leisure activities.

Similarly, women born in Canada spend more hours overall with their children than Canadian born men ($p=.02$), more hours doing recreational things ($p=.04$), and more hours spent online with them ($p=.07$) than men. Television viewing is comparable. In households, partnered mothers spend the most number of hours with their children overall, a mean of 19.3 hours per week ($p=.02$), and they spend the most number of hours doing recreational things with them, a mean of 11.4 hours per week ($p=.04$). Again, television viewing is comparable, but overall mothers spend an average of one hour more per week with their children than men do ($p=.07$). Across all different contexts, women spend more time overall, watching television, doing recreational activities and going online with children than men, again advocating the role domestic responsibilities and gender roles play in how people shape the domestication of the internet.

Sentiments about Home Internet Use

While speculations can be made about the state of the modern family, it is prudent to ask people directly what their sentiments are. The Connected Lives survey asked participants about the frequency of disagreements about the home internet see (Table 6.3), and tensions and conflict around internet use appears to be few and far between. Most households have a few disagreements about who uses the internet, and this might be the case more so in households with only one computer or more than one child; just under two-thirds (62%) of parents note they never have disagreements about who uses the internet. More than three-

quarters (79%) of partnered parents say they never do, while just over half (55%) of partnered parents and under half (45%) of single parents never do either.

Moreover, disagreements about someone using the internet too much in the home do not happen regularly: 81% of partnered couples say they never disagree about this and just over half (52%) of partnered parents say they never do. Overall then it would seem that for the most part, the home internet does not raise red flags of major concern for these participants, even at this early stage of home internet integration when knee-jerk reactions to home internet use were mostly dystopian (Sanders et al. 2000; Nie & Hillygus 2002). This seems contradictory to the media accounts of fragmented families as a result of internet saturation. However, these data do not really reveal much about the nature of the disagreements, the contexts in which these disagreements might take place, and whether these are major disagreements or just inconsequential incidences that happen to surface throughout the day when people want to use the home internet at the same. Therefore, the experiences told during the interviews give some further depth to possible contentions (Lanigan et al. 2009) surrounding the home internet, and how that is addressed and dealt with by participants.

Table 6.3: Frequency of disagreements about the home Internet

<i>Disagreements about who uses the home internet</i>		Never	Some of the time	Half of the time	Most of the time	All of the time	Total
Single Parents		45%	55%	0%	0%	0%	100%
	<i>n=</i>	9	11	0	0	0	20
Partnered Parents		55%	37%	2%	4%	1%	100%
	<i>n=</i>	51	34	2	4	1	92
Partnered Couples		79%	21%	0%	0%	0%	100%
	<i>n=</i>	45	12	0	0	0	57
Total		62%	34%	1%	2%	1%	100%
	<i>n=</i>	105	57	2	4	1	169

p=.05

<i>Disagreements about someone using home internet too much</i>		Never	Some of the time	Half of the time	Most of the time	All of the time	Total
Single Parents		55%	35%	0%	10%	0%	100%
	<i>n=</i>	11	7	0	2	0	20
Partnered Parents		52%	40%	3%	6%	0%	100%
	<i>n=</i>	47	36	3	5	0	91
Partnered Couples		81%	11%	4%	4%	2%	100%
	<i>n=</i>	46	6	2	2	1	57
Total		62%	29%	3%	5%	1%	100%
	<i>n=</i>	104	49	5	9	1	168

Discussion: Webbing Together

In chapters three, four and five I separated the experiences of home-workers, immigrant status, and different households in order to explore how different daily practices can shape the domestication of the home internet in various ways. In this chapter, I thread these contexts together to discuss some common practices that surface in the interviews and frame this within the household because it is the site of domestication. Having looked at internet ownership and acquisition, communication and information seeking – typical uses of the internet – the intention of this section is to consider some of the different aspects of home internet integration: the various ways that circumstances allow for household members to share online time together in new and creative ways.

If we think about watching television together with family members (we are all watching one television screen), it does not seem such a far stretch that families would watch a computer monitor together as well. This is especially the case when people can customize their viewing content and this is something one cannot do as easily with television. The internet can provide more opportunities for household members to view something online together than television does, an innovative way for family members to spend time together that can happen during the demanding schedules of people's lives. Indeed, since the time of the last phase of data collection in 2005, not only do major broadcasting stations now post television episodes on their websites, but commercially supported websites like hulu.com allow people to stream television episodes at their leisure in the United States, and *Netflix* streams television series and movies to gaming consoles like the Xbox 360 in Canada. This allows for much more flexible – and less costly - television viewing tailored to not only personal interests, but also scheduling and time demands of family members. Because the

internet is so flexible in terms of viewing content compared to television, there is much more opportunity to view online content together based on everyone's shared interests. But, it is yet unclear whether this type of pervasiveness reinforces individual internet use or whether it creates opportunities for shared use.

Shared Screen Time

The interviews suggest that internet use in the home can be a collaborative practice where people will find information collectively, viewing websites together at the screen. The things people view online together differs depending on who lives in the home, whether it is real estate, researching product information, children's websites, favourite televisions shows, or any other hobbies and interests family members may share. Importantly, the kinds of things that they are sharing with family members are often contextually located within the composition of the household; different households share different things because of the people living in the home (see chapter five).

Couples go online together to share mutual things of interest, suggesting that they have created new ways of spending time with each other, and suggesting that the internet can be used for collective viewing much like the television. Donald³³ comments that he and his wife look at online travel information together:

Interviewer: Do you and your wife ever go online together?

Donald: Yeah, we will. We will do that...it happened with travel stuff. Yeah, we will discuss: "what does this hotel look like to you?"

³³ Donald is married, he is not a home-worker and he was born in Canada.

Interviewer: So if you are planning something together, then you will go online together?

Donald: Yeah.

Similarly, sometimes when Olivia³⁴ and her husband look at things online together, it is not something that is planned or something they specifically set time aside and do. For Olivia, internet time together often happens during conversations, while she is working at home, or while watching television when follow-up information is wanted or needed. In Olivia's household, the home internet has become embedded into the everyday practices of family members. At other times, her husband is looking at something online, and she joins him:

My husband looks at real estate online - all over the place. Just the other night we were both sitting and looking at condos in Mexico. "Let's do it!" (she laughs). We were looking at property in Greece but it was ridiculous. On analyze.ca you can look all over Canada on there, so we will often do that. So yeah, sometimes we will sit together, mainly for that purpose - look at houses or something and dream.

These collective internet experiences between partners sometimes overlap with shared television interests. Tammy³⁵ and her husband are *Amazing Race* fans and they go online together to look for information about the show: "We're huge *Amazing Race* fans... after the show we'd go down and check clips for the next thing to try to choose...Like fun things...".

Couples use the internet together not only for shared personal interests, but also for such things as home renovations or "researching anything that we need to make a decision

³⁴ Olivia is a married mother, a full-time home-worker and was born in Canada.

³⁵ Tammy is a married mother, she does not work at home, and she was born in Canada.

on, like comparing cars...” This suggests not only the pervasiveness of household internet use, but how the internet is used to help families with tasks they are working on together.

Leanne³⁶ explains:

Interviewer: What kinds of things are you doing together?

Leanne: If it’s my husband and I, we’re doing research together on various different things we both like; we’ve been doing a major renovation project so we’re researching what kind of toilet to buy...

When couples go online together, their shared online activities are shaped by common interests, household needs, or by talking to family members who live far away. Viewing the computer screen together is not only restricted to looking at things, but also communicating together with family and relatives who live far away:

Ian³⁷:...when I chat with my family, my wife - she sits with me. She also chats with them. I chat with her family too. So she sits with me, and she chats with her family.

This is particularly important for people with family and friends in other parts of the world – such as immigrants - who rely on internet communication to maintain their ties when people are very far away (see chapter four). As Tapscott (1997) argues, the internet relocates people back in their homes doing assorted tasks or activities (communicating with others or information seeking), and spending time together. Megan³⁸ agrees:

[The internet] keeps you at home for example, if you are going to make travel plans and if you’re going to buy something, you’re

³⁶ Leanne is a married mother, a part-time home-worker, and she was born in Canada.

³⁷ Ian is a married father, a part-time home-worker, and he was not born in Canada.

³⁸ Megan is a married mother, an over-time home-worker, and she was born in Canada.

going to end up doing it over the internet, and Mark and I would discuss it together, a little more I think, when we're doing Internet shopping, or making travel plans. Whereas, if we were to go to a travel agency...

Interviewer: If you were to do that, you would do it separately?

Megan: We would be more likely to do it separately when one of us would have time. Otherwise, the kids would be with us and we would have a hard time talking.

Showing & Sharing

These interview excerpts suggest how internet use in the home can be a collaborative practice where people will find and view websites together at the screen. However, in instances of individual internet use, interview participants also note that sometimes this individual online time leads to communal online time. In these examples, participants 'show and share' (Kennedy 2007; Kennedy & Wellman 2007) various things they find online with family members. People seek online information for themselves, their friends and family, and the people in their homes such as partners, children and older parents (see chapter five). In this sense, they may be using the internet by themselves initially, but they then share what they find online with family members - a "Hey! Come look at this!" situation:

... if I'm looking something up, like I talked to you before about looking up houses and vacation stuff, I'll call him over and say: "Look at this!³⁹".

³⁹ Olivia is a partnered parent who was born in Canada and works at home full-time.

...just relevant things or just sometimes a news story, I'm like:
"Hey, look at this!"⁴⁰

...if there's something interesting that comes up, like on the news that might have related to some spot we visited on our trip, I will call her and say: "Look at this story here" or something like that.⁴¹

...if he's doing his work, [it] means someone has to take care of the kids...but yeah, it will be like: "Look look, come come, this is interesting!" and we will look together...there is a link [between our school interests] a lot and we enjoy to talk about that.⁴²

...we do a lot of stuff parallel and then bring the results back and say: "oh yah guess what, I did find this" or "I get can't anywhere, can you come give me a hand?" You know? "You said you found something last time, where did you get it?" stuff like that.⁴³

The internet does not have to be a solitary practice, but it can be a communal one as well.

These couples share things they find online demonstrating how individual searching can lead to communal family viewing. It becomes a shared moment of interest that is experienced with family members. These interview excerpts are examples of how couples have integrated the household internet as more of a communal shared experience than an introverted one, and

⁴⁰ Terrance is partnered, he is not a home-worker, and he was not born in Canada.

⁴¹ Andy is a partnered parent who does not work at home, and was not born in Canada.

⁴² Bianca is a partnered parent who does not work at home, and was not born in Canada.

⁴³ Dorothy is a partnered parent who works at home full-time and was born in Canada.

one that is shaped by not only their personal interests, but also the interests of the family. Yet the types of experiences that household members have with one another may vary depending on the relationships they have with one another. There are also shared online experiences between parents and children, and these moments can reflect gendered relationships in households.

Digital Parenting

There are differences in shared online experiences in terms of what household members share and who they share with, and these differences are shaped by roles that are tied to domestic responsibilities and parental roles. For example, some parents go online with their children to share interesting things, to find information, or simply just to play. Some parents help with homework, as Felicia⁴⁴ notes: “Oh, yes. Last year he was doing some work for a history project and we did some research on costumes and dress of the time.” Other times, online time with children is for fun. Henry⁴⁵ goes with his children to the *Thomas the Tank Engine* website because there are different little games, coloring, and puzzles – his son loves to do the internet puzzles.

However, the kinds of shared experiences women have with their children online suggest a connection to their role as mother and caregiver. Megan talks about her time online with her young daughter:

Well, we go on the *Treehouse TV*; it’s like the kids TV station,
they have a website and they have games and music so...if I’m on

⁴⁴ Felicia is a single mother who does not work at home, and she was born in Canada.

⁴⁵ Henry is a married father, and over-time home-worker, and he was born in Canada

there and she's coming around, I'll type in the *Treehouse TV* website and look at some stuff with her.

Kate's⁴⁶ experiences are similar to Stephanie: "Sometimes, with my daughter; she shows me some music, she finds something interesting she wants to show me". Katie and Stephanie spend time online with their daughters in new ways; they spend time together online, but children also show and share with their parents. Even children who are in their teens and nearing adulthood can find things of interest online to share with their parents, as Sally⁴⁷ notes:

...My youngest son and [I] will spend more time finding fascinating things on the computer like "oh, come and look at this!" You know? Whatever, right? So sometimes we will sit side by side at the computer and do stuff.

Because the internet is flexible and interactive, it has far surpassed the capabilities of television and passive viewing. Families have shaped and integrated the internet into their home leisure practices. Moreover, not only are parents spending casual or entertaining time online with their children, but they are also using the internet instrumentally as a learning and educational tool with their children. Nancy⁴⁸ explains:

...we have access to the *Winnie the Pooh* site for counting and alphabet and stuff. So those kinds of educational games, not game-games but like counting or alphabet or you know? *Dora* and *Blues Crews* - like nursery rhymes and stuff.

⁴⁶ Kate is a married mother who does not work at home, and she was not born in Canada.

⁴⁷ Sally is a married mother, she works at home over-time, and she was born in Canada.

⁴⁸ Nancy is a married mother who works at home full-time, and she was not born in Canada.

Nancy's experience is an example of how she shaped her internet use into a fun, yet educational and instrumental tool for her daughter. But this also reveals how the internet is intertwined with her role as mother and how this is sometimes blended with her work at home; parents integrate the internet into their parenting, contextually shaping their internet domestication. The internet works as a generational bridge, as a shared online and physical experience that is enjoyable. Sharing internet time with children not only teaches children useful technological skills, but parents can use the time to monitor children's online activities and teach internet safety. Where parents once read paper story books to their children at bedtime, we might expect that a future bedtime story will be a collaborative visual, textual and auditory tale on devices like the iPad tablet. These physically shared online experiences within households and between family members again suggest that internet use does not have to be a solitary activity. Instead, showing and sharing on the internet can include all family members just as it does for watching television. Granted, people may not have comfortable sofas in their office spaces to accommodate an audience, but they may have a laptop that can travel anywhere in the home or their home computers are set up in places, such as living rooms, that allow several viewers.

Discussion: Recreating Household Spaces

In chapter three I discussed some of the reasons households acquire the internet in their homes, and how sometimes parents acquire another computer to alleviate conflicts and disagreements when there is more than one child. Ultimately, there are considerations on where to put the additional computers with internet access. Where to place the computer with internet access, either in a private office in the home, or in a communal space, greatly affects

who uses it, and when they use it (Frohlich & Kraut, 2002; Haddon & Skinner, 1991; Aro & Peteri, 2003). For example, when the computer is placed in a person's private office space, it can deter his/her partner and children from using it (Haddon & Skinner, 1991). Similarly, if the internet is placed in a parent or child's bedroom, it can be difficult for other household members to have access to it when they are sleeping – and it is much more difficult to keep a watchful gaze on children's internet use. Family members must make the decision on where to situate the internet access point. This decision might be contingent on how the internet is perceived; whether the internet is for work, play or school will shape where the internet access point is located. New homes are being built with internet access points already incorporated into the design of the homes, reflecting the prevalence and significance of the internet in people's lives and cultural changes in terms of how the internet is conceptualized (Dutton 1999; Haddon 1999; Frohlich & Kraut 2002; Hampton 2001). On the other hand, people in older dwellings (or rural and remote locations) may be constrained by household mechanics in terms of where the internet goes.

Household Mechanics

Household internet space may indeed be shaped in ways that suit the household, but, external factors are also influential; the size and type of the home, children, working at home, and the perception of the appropriateness of having the internet in various rooms will frame where the internet is located (Frohlich & Kraut, 2002). East York is an area in the Greater Toronto Area with an interesting integration of small wartime bungalows to large-scale homes, and apartment buildings ranging from less than five levels to levels over twenty-five floors (see Figure 2.1). This is of importance because the kind of homes Canadian-born and

Non-Canadian born participants live in differ significantly; just under two-thirds (62%) of Non-Canadian born survey respondents live in an apartment, a striking contrast to the 80% of Canadian born respondents living in houses.

At the time of data collection, many immigrants were still constrained by electrical wiring, telephone jacks or cable ports in order to connect to the internet; in households using dial-up services, where to put the internet access point is influenced by the number and location of landline jacks. The same can be said for DSL, which also requires a landline jack, and cable access which requires a cable port, Juan⁴⁹ describes his constraints:

Interviewer: ... Your computer is kind of near the front there. Is there any reason you put it over there as opposed to say over here or something?

Juan: Why over there? Well, because I think - we think - it is the best place, because there is a connection with the telephone. There is connection there; we don't have a connection here. In the other room we have a connection, but we don't have a place to put a computer in there.



Similarly, John⁵⁰ who lives in a freestanding house notes the age of the house and its constraints:

⁴⁹ Juan is a married father who does not work at home, and he was not born in Canada.

⁵⁰ John is a married father who does not work at home, and he was born in Canada.

Interviewer: Your access point is in the basement, how did you decide to put the computer down there?

John: Well you know, that's interesting because these houses are wired from 1952 so that gives me serious limitations to where I put the computer.



Therefore, the mechanics of a house can also help shape how the internet is integrated into the household, with notable potential constraints in older houses or apartments⁵¹.

Another consideration is the layout of the house itself and the number and size of rooms. For example, apartments do not have basements that can be converted into offices or recreation rooms. Often the growth of a household - or having children – converts the initial office space of the childless couple into a child's bedroom, and the computer moves to another spot. In small apartments or single person households that have one bedroom, choices become limited in terms of where to put the computer. Terrance⁵² notes the restrictions of the layout in his household:

⁵¹ With the onset of wireless internet connectivity, some of these problems are alleviated. However, in areas that do not have DSL (rural locations), wireless satellite internet might be an option (but it is still expensive, and not as fast as broadband).

⁵² Terrance is married without children, and does not work at home., and he was not born in Canada

Interviewer: How did you decide to put the computer in the living room?

Terrance: That was pretty much decided by the layout of the place. The bedroom would not have had enough space, and there's just not that many locations. It's the layout.

Interviewer: Would you rather have it in a different space?

Terrance: If I had a choice? Yeah.

Interviewer: Where would you rather have it?

Terrance: If I had another room, you know?



Andrei⁵³ has thought about buying another computer, but is constrained by the number of rooms in the house: “If we buy a home with two or three bedrooms, I think we buy another computer”. Often the choice of where to place the internet is constricted by household mechanics (as discussed above); there might not be a *choice* of location, but instead a *default* location of internet access.

In Zowie’s East York apartment (see Figure 6.1), the internet is located in the dining room, and this works better than having it in the master bedroom. She and her husband IM with family members in Karachi both together and separately frequently, and this space allows them the best access point given their architectural constraints. In contrast, Barbara⁵⁴ and her husband decided to put their computer in the master bedroom (see Figure 6.2) instead of the dining room because she had concerns about her children using and breaking the computer. For Barbara, putting the internet in her bedroom was an active choice that is situated in not only the mechanics of the apartment, but also within the social world of her

⁵³ Andrei is a married man with ought children, how does not work at home, and he was not born in Canada.

⁵⁴ Barbara is a married mother who does not work at home, and she was not born in Canada.

family. With the internet in her bedroom, it is intentionally separated from main living spaces.

Figure 6.1: Home Internet in Dining Room



Figure 6.2: Home Internet in Master Bedroom



Social Spaces in the Home

In some homes there is more choice in where the internet can be put. However, some household spaces are more conducive to social interaction, which can contribute shared internet time. Communal areas such as the dining room, living room or family room, spare room or basement/recreation room allow family members easy access to the internet while communicating with others at the same time. These more accessible or ‘public’ locations in the home encourage household members to ‘show and share’ what they are doing online (see chapter five).

The decision to put the internet in a visible location is shaped by family members; interview participants with children noted that they were concerned about being able to see what their children were doing online and being able to track their activities. Prue⁵⁵ shares her concern over how her children use the internet:

...and then upstairs, we have a master bedroom, two bathrooms, two bedrooms. It’s funny, we talked about putting a computer up there, but I don’t want the computer out of my sight yet. My husband would like it out of here, just because he aesthetically doesn’t like it here. But I told him I don’t want it out of our sight. I want it where, when the kids are on it, someone’s aware of them being on it, and we can be in tune with it...It’s like, if you want to use the computer, you use the computer here, because we’re always either in the kitchen or the family room. That’s kind of

⁵⁵ Prue is a married mother who works part-time at home, and she was born in Canada.

where we live in the house, so it's a great way to monitor the use...⁵⁶

The visibility of the computer also allows parents to monitor how long children stay online, and if they are on too long parents can easily turn off the computer or end their session.

Dima⁵⁷ explains:

Interviewer: Why is your computer out here?

Dima: We think about the future to buy my son a computer. But not now because I don't want him to stay in his room on the computer. I permit him one hour on computer to play...I don't want him to play [too long], that's why it's here [in the living room]. I can see my son.



While communal spaces allow for easy monitoring of children's activities, these spaces also allow everyone else in the household to easily view what parents and/or spouses may be doing. Under the watchful gaze of others, searching for information or communicating with others may be limited or constrained, and showing and sharing might not be as appropriate or appreciated. For family members working from home or doing school work, loud communal spaces may not be as useful or practical as a more private space (see chapter three). The location of the household internet in spaces that are available to others or in areas where there are media and technologies (such as the television) can affect privacy and concentration (see Figure 6.3 and Figure 6.4) (Frohlich & Kraut 2002).

⁵⁶ A digital Photo was not taken of Prue's residence.

⁵⁷ Dima is a married parent who does not work at home, and she was not born in Canada.

Figure 6.3: Home Internet in Living Room



Figure 6.4: Home Internet in Living Room



People are aware of the structural limitations that their household presents for internet integration, whether it is small rooms, lack of phone jacks or whether the internet is in the office or living room. What is particularly interesting is how people actively problem-solve and negotiate these restrictions. For example, laptops with a wireless connection allow people to be online whenever they want and in any room they choose. This can take them from the kitchen to search for recipes, to the office for paid work, to the living room for

recreation or leisure pursuits online. Notions of space and place become more fluid if you are able to take the internet with you wherever you go, as partnered mother Ruth⁵⁸ notes:

I'm getting old and stubborn, so now that it's wireless...I want to be where the sun is. I want to be where if it's a cold night, I'll take it down here from upstairs if [my husband] is not using it and turn on one of the gas fireplaces and be comfortable. So, now that it's wireless, I'm anywhere.

Reconfiguring (Internet) Living Spaces

Some families take measures to reconfigure their household spaces. Remodelling rooms, finishing basements and rearranging layouts reflects the active thought process of where to put the household internet and how families are reconfiguring their household spaces to further shape internet domestication (see Figure 6.5). In Adrian's⁵⁹ home, changes were being made to accommodate the family's media and internet needs, again suggesting how household spaces are reinvented during the shaping of internet domestication.

⁵⁸ Ruth is a married mother of adult children, she does some over-time work at home, and was born in Canada.

⁵⁹ Adrian is a married mother, she does some over-time work at home and was born in Canada.

Figure 6.5: Renovating Household Spaces in East York



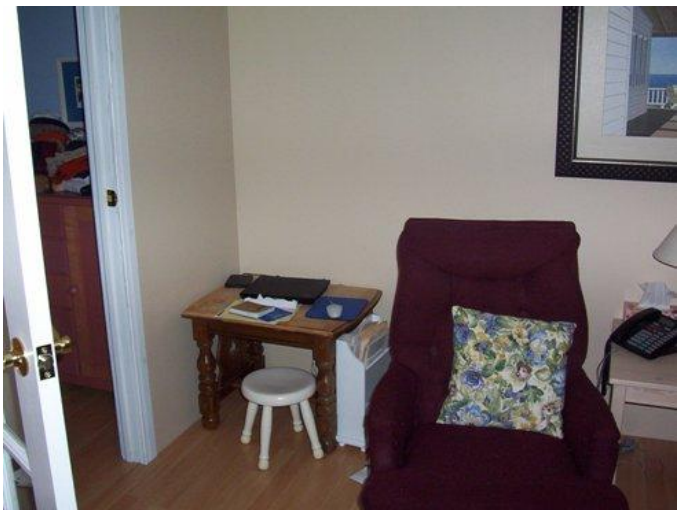
The digital photo of Adrian's home internet location reveals a household shift from an internet that is used infrequently, to something much more embedded:

Interviewer: So how does that spot work for you? I mean is that somewhere where you think it's going to stay or is there a place that's better?

Adrian: Oh no, hopefully not. Our plan is that - eventually turn - we have a spare bedroom back here that were hoping to turn into a den, so we're gonna hopefully [put the] TV, couch, computer in there...

Adrian's Husband: ...we just bought a computer hutch with everything centrally there, the laptop and [the] computer as well - everything will be there, fax, scanner...

Adrian: God I hate all that...



Samantha⁶⁰ also talks about how an open area was created for computer use, suggesting how different contextual threads can weave together to reformulate household spaces:

⁶⁰ Samantha is a married mother who works part-time at home, and she was born in Canada.

...we have an open area on the second floor that we designed on the second story. So, it could have been a 4-bedroom, but I wanted it to be open. So it's like a big landing where the computer is. So when I'm working at home, or doing something at home, I'm available to everybody still. I don't want to be off in a room somewhere.



While some utilize the mobility of laptops in their homes, others have opted to reconfigure their household spaces by renovating rooms or adding and expanding existing rooms, such as the reconfigured family room in Figure 6.6. This points to the importance of the home internet in the lives of Canadians, and also how embedded it has become into people's daily practices.

Figure 6.6: Home Internet in Family Room



In their own way, these families in East York have domesticated the internet and they shaped the domestication process. They have adopted the internet, shaped how they stay connected and search for information, they have reframed family time by merging online activities with physical time spent together, and they have also negotiated household spaces. Perhaps Terrance's comment says it best: "I could not do without it. It would be like having no kitchen in your home" or Burton⁶¹ who describes his feelings about the home internet:

It's definitely been a positive addition, helped the kids do schoolwork. It's something that we can use for whatever little silliness we want to use it for; settle an argument or collect information.

Terrance's and Burton's sentiments about the relevance of the home internet in their lives is shared by most interview participants in East York.

Summary & Contributions

At the beginning of this chapter I broadly asked: *how have households domesticated the internet as a shared practice?* To answer this, I first use survey data to broadly describe the time people spend online with household members. The interviews offer further evidence of the social character of the household internet and explores the planned and incidental shared online experiences with partners and children to suggest that not only have families developed and reconfigured how they spend their time together, but their household spaces have integrated the home internet into their daily practices, further shaping and framing the domestication process. In this chapter, I thread the contexts of home-workers, immigrant status and household composition together to discuss some common practices that

⁶¹ Burton is a married father who works part-time at home, and he was born in Canada.

surface in the interviews, and I frame this within the household because it is the site of domestication. As with internet ownership in chapter three, communication in chapter four, and information seeking in chapter five, there are different practices at play in the shaping process; the flexibility of the internet allows people in different households to show and share various things they find online with others inside their household, shaping its integration into the home. These collaborative moments between couples or between parents and children can be planned or incidental, but are always framed by shared interests and needs. My research suggests that these are new and different ways for families to spend time together.

There are also gender differences in shared online experiences in terms of what household members share and who they share with. My research reveals how these differences are shaped by roles that are tied to domestic responsibilities of the household, practices that were also present in chapter three and four. Mothers spend more time online with their children than fathers do, reflecting the amount of time women spend with children as primary caregiver. My contextual investigation and analysis contributes to the glaring gap in household internet research; few studies bridge survey and interview data to unravel the complicated practices and the diverse experiences of home internet domestication.

Moreover, although family members may need or want to have the internet in certain areas in their homes, some households – most notably Non-Canadian born participants who live in apartments - are constrained by the mechanics of the home itself. These constraints can frame how the internet is integrated as a shared experience; private or closed off internet space are less conducive to communal use compared to more open or public areas of the household. Furthermore, the remodelling in some East York homes also suggests the

burgeoning importance of the internet within these households, and its increased prevalence of use. People actively shape (or in this case remodel) the domestication process, but more importantly, the remodelling initiatives also demonstrate the meaning and significance of the home internet in their lives.

The discussion in this chapter notes that in most of these Canadian homes, people use the internet to share online experiences together, suggesting a new and different way for household members to spend time together. People have evolved family time by merging online activities with physical time spent together, and they have reconfigured household spaces to accommodate the ubiquity of the home internet.

The chapter that follows is the final chapter of this dissertation, which summarizes my analysis and offers a discussion of the key contributions of my research. I address my overarching research question and thread together the various contextual practices that contribute to the social shaping of the domestic internet. I offer some personal insight and critical thoughts about the socio-cultural significance of my dissertation research and provide further thoughts about the future of the domestic internet.

Chapter Seven: Domesticating the Internet - How the Internet was won

Introduction:

As I write my final thoughts in this conclusion, I think about the years that have passed since the beginning of my dissertation research; the pervasiveness of internet use in my daily life has certainly increased – meeting my personal demands and needs. Although my days are quite similar with respect to parenting, leisure activities plus researching, teaching and dissertation writing, the integration of the internet - whether by personal computer, laptop or smart phone - has continued and evolved.

On a typical day, my morning starts off as it always has: I check my email, peruse FaceBook and Twitter to see what has been happening in the world and with my peers. As I am standing in the kitchen brewing my coffee, I check the fridge and cupboards and add to my grocery list, which is now on my iPhone. I open up a handy application I use to keep a running grocery list, and I can easily tick and un-tick items. I no longer have to worry about forgetting my list at home because my cell phone is always with me. It is a handy application that anyone in my home can access and edit through their web-browser or on their iTouch; individual use but part of the collective.

I think about what I want to prepare for dinner that evening and recall a recipe I want to try. I close off the grocery application, open the recipe application, and flip through my collection of recipes, including one I entered myself - my grandfather's Kartoffelkloesse (Potato Dumplings). I find the recipe that I discovered online through my computer's browser. With this application, I can save recipes that I find online, and later view them on my iPhone – handy for when I am in the kitchen cooking and following the recipe. I add several items to my grocery list, which in turn saves the items for future lists. With coffee

still in hand, I prepare for an online meeting that I have at Noon EST with Rabindra (Robby for short), a colleague in Los Angeles.

It is 9am on the West Coast, and Robby answers my Skype call with his video camera active. He greets me – also with a coffee in hand – but with his four-month old son is sitting on his lap giggling at the screen contents. Robby shares the domestic load equally with his wife, and today he is working mostly from home with his son. Our call runs later than we expect, and Robby has a face-to-face meeting in his department. He is talking to me from the computer in the living room, but he needs to get his son ready to go out. He quickly grabs his laptop and heads to his son's room – signs into Skype (no video) and finishes our conversation while he changes his son for the outing. I am reminded of how years ago I occasionally brought my (then) young son to school and work with me – sometimes because my mother was not available to babysit or simply because I wanted him with me. I speculate how things have developed with the pervasiveness of home internet use, and how this can create new and sometimes blurry boundaries between public and private spheres.

While I am cooking dinner, I listen to my favourite music on iTunes via the computer in the living room. I decide that I want a nice slideshow of pictures playing, so I network with the shared picture files on my main computer in the office and start the slideshow. During dinner conversation, there is a friendly dispute that needs further information to settle. My teenager (who is now an adult), does a quick search online on the living room computer and returns triumphantly because he is correct. In defeat, I derail the conversation and remind him that he has a chemistry test in the morning. He assures me that he has remembered (and studied), and notes that the shared online calendar I created for our

appointments and his school related tasks has been helpful for him. In truth, it has also been helpful to me so that I can follow up on his school work assignments and tests.

In the evening, I relax in my living room, which is now my media-hub; on one side is my previous computer with wireless internet access (connected to the television screen and stereo-system) and my partner's Xbox 360, beside it my BluRay player and on the other side sits my own Xbox 360 – also with wireless internet access. We decide that we want to watch one of our favourite television shows, but it is not scheduled on any television stations. Instead, I open a browser, go to the show's website and watch the episodes online (without commercials) with my son and boyfriend. We pause the show for a few minutes during the show for a popcorn break and resume once we return.

When it is time for bed, I set the alarm on my iPhone and change the alarm tone to play chirping birds, a nice way to start the day. As I do so, a reminder pops up – it is my niece's birthday next week. In the morning when I get to the computer again, the reminder will also be there. I fall asleep thinking about birthday cards, and am glad that I entered her birthday last year into Outlook⁶².

My typical day reflects how integrated the internet has become in my daily life. But what is noticeably different from when I began my research is the overlap and convergence of ICTs; websites converges with iPhone applications (such as the grocery and recipe application), computer programs are accessible on smart phones and continuously synchronized (such as Microsoft Outlook or Google Gmail), and importantly these individual uses can be accessed, used and shared by other family members. My personal internet experiences within the home again remind me that my immediate social world is a complex web of social practices at play, and this contextualized how I domesticated the internet – and

⁶² Microsoft email and appointment program on my computer.

how I continue to domesticate it. My early sentiment about harnessing the internet unfolds like an old Western movie: this story is about how the internet was won.

Because of my own experiences with the household internet and a solid curiosity about the world and the people within it, I sought to investigate and empirically research the social domestication process in East York. I posed a general question in the introductory chapter that guided my research: *How does the domestication of the internet develop as a set of contextual practices?* I was unsatisfied with most of the existing research because I felt that context was missing from their analysis. Thus, using a social shaping approach within the framework of domestication, my dissertation investigated the social character of domesticating the household internet, and how the domestic internet is shaped by various social practices within households by families.

My objective was to characterize some aspects of these social worlds in East York by exploring the role that paid work, immigrant status and household composition play in framing internet practices. I looked at how families actively shape their domestic internet: they way they communicate, the information they search, the time families spend together – all carried out online at home. In response to ubiquitous home netting, some household spaces are negotiated and have evolved; families renovate spaces and reconfigure existing living spaces to accommodate their internet use. I posited that this can lead to new ways of thinking about family, family time and our relationship with internet.

Answering my research question means thinking about and identifying the kinds of things that shape home internet use and integration and contextualize one's social world. Although there are choices in how the internet is integrated, some of these choices are not necessarily conscious choices (Williams & Edge 1996), and instead are actions that are

framed within the context and location they occur – here, the household. But the home is not an isolated island. Instead, households are a nexus of activity – the command post – where different aspects of our lives (personal and professional) seemingly come together. Internet domestication also evolves from a set of shared practices operating within the household. As such, I argue that because previous research regarding the household internet often lacks this contextual articulation, attention needs to be paid to people’s social reality in order to understand the complexity of the domestication process. There is a story to be told about the people who use the home internet and some of the practices that help shape its domestication.

Methodological Contributions

My research addresses an epistemological gap concerning what we know about internet domestication. I address this gap by using a methodological process that creates rich and detailed contextual stories, and thus help in understanding the social shaping of internet domestication. My approach to examining internet domestication is surprisingly novel in the field of home internet research: a triangulation of survey data, interview data, and digital photos provide multidimensional aspects (Denzin 1970) to people’s home internet experiences, and collectively allow for a more meaningful understanding of what ubiquitous internet really looks like. I note ‘surprisingly novel’ because it is somewhat unexpected that the gap in knowledge about the domestic internet even exists. This is not to say that researchers have not qualitatively investigated home internet use, some have (Hampton 2001; Bakardjieva 2005) - but these are scarce in both American and Canadian research, and even fewer who have conceptualized its pervasiveness as a domesticated ICT.

Most research does not capture or connect home internet use to other aspects of people's daily lives that also take place at home. My research offers an exploration of how internet domestication as a complex web of practices that weave together. The participants use the home internet to mediate the boundaries of time and physical space in varying ways. In addition to demographics and composition of households, the 32 page Connected Lives survey offers a much more detailed and encompassing look at internet use and integration to include people's social relationships with friends and family, the composition of their social networks and how ICTs are used in different kinds of relationships with people. The Connected Lives Survey is the first survey in Canada that asks these kinds of questions. Since then, the survey has been replicated in the rural town of Chapleau, Ontario (with some adjustments made appropriate to the geographical location), and in the United States several sections of the Connected Lives survey were replicated for the 'Networked Families' report for the Pew Internet and American Research Organization (Kennedy, Wells & Wellman 2008).

Much of what is known about home internet use stems from quantitative surveys, offering some patterns of use across Canadian provinces, but with limited depth and breadth. The use of digital photos and the interviews conducted in East York offer personal stories and experiences of home internet use, and this contextual standpoint of the user cannot be gained from survey instruments. East York is near the heart of metropolitan Toronto, about 30–45 minutes travel from Toronto's central business districts. Its population is ethnically and socioeconomically mixed, residing in houses and apartment buildings; a combination of suburban and urban spaces. The diversity of heritage in Canadian born people and the growing number of Canadian immigrants in East York lends itself to a multi-cultural nexus.

This cultural feature is unique, and something that Toronto is known for. Ontario has a high percentage of immigrants compared to the rest of Canada, somewhat comparable to the immigrant population in California compared to the US immigrant population. Although my research reflects aspects of Canadian culture, it is conceptually applicable to home-workers, households and immigrants across North America.

Theoretical Contributions

My research uses a Social Shaping of Technology (SST) approach of households in East York, Ontario to investigate how internet domestication develops as a set of contextual practices. The SST situates the relationship between people and technology as reciprocal and dynamic instead of linear and static (Mackenzie & Wajcman 1985; Edge 1988; Elliot 1988). People have some choice in the technologies they use and integrate, and this means different and diverse kinds of integration and outcomes, a framework that is particularly appropriate for my investigation.

My theoretical contribution to SST theory is twofold; to support the existing theoretical tenets and to enhance the theoretical framework of the SST theory. My research supports the SST theory but instead of examining traditional media and communication technologies (such as the television and landline) found in previous work, I offer a theoretical application of the SST theory to a new and different technology – the internet. This provides a fresh approach and a modern application of the SST theory, which contributes to its framework further by strengthening and reinforcing its tenets.

Although the SST theory notes the active role people play broadly in the use of technology, a pitfall is that it does not address the context of people's technological choices

(Mackay & Gillespie 1992). Choices are framed by our social world (Baber 2005), and as such, my research in the context of the home contributes to this theoretical gap by characterizing various aspects of the ‘social’ (home-workers, immigrant status, and household composition) and the practices they encompass. I provide a highly detailed case study illustration of the social shaping of internet domestication in diverse Canadian households, which will enhance the SST theory.

Globally, internet domestication has looked at single aspects of domestication, such as religious practices or community involvement. In Canada, Keith Hampton looked at home internet users and their neighbourhood engagement using surveys and interviews. Maria Bakardjieva examined everyday home internet use providing 15 technobiographies. Both are useful, but as a starting point. My research points to additional social aspects (immigrant status, home-workers and the structure of the household) and builds on what we know about the kinds of social things that contribute to internet domestication. My research also supports Livingstone’s (1992) interpretive approach that provides accounts of how husbands and wives utilize domestic technologies within the framework of family dynamics, and builds on it; domestic internet is important in their lives because the internet helps women with their daily routines, such as chores and childcare.

Understanding Our Social World

My research contributes to an understanding about the social practices that shape the internet domestication process by characterizing people’s social worlds. I discuss paid work, immigrant status and household composition, with attention paid to gendered differences between women and men that can further contribute to varied experiences and diverse social

worlds. Doing so helps explore domestication as a process that is shaped by people's practices, and I argue that it takes different things (needs that are framed expectation, experiences, affordances and constraints), to shape this domestication.

My research uniquely situates people's home internet experiences not only within people's immediate social worlds, but also more broadly within in the society people live in. Although some have argued that our current societal landscape is a continuation of industrial society (Webster 2002), others have argued that we have moved beyond it to a post-industrial society (Bell 1976), or a network or information society (Van Diik 2006; Castells 2000; Wellman 2004; Wellman & Haythornthwaite 2002). Barry Wellman describes these changes as the 'Triple Revolution', which reflects the transformation of social networks, pervasive internet and mobile connectivity (Wellman 2002; Boase & Wellman 2006). Networked individuals live in a world that they facilitate by ubiquitous ICT use (Rainie & Wellman 2012), yet it is only recently have researchers begun to investigate the outcomes of these social and technological changes within our social institutions, such as the workplace, the educational system, and households and families. Broadly, my research contributes to our understanding of how networked individuals – who are seemingly technological nomads – operate within their daily activities, and within households and families.

My research reveals different aspects of the 'social' and how these intersect to reveal complex social realities within our homes. I suggest that although active agents, choices are framed within the context of these social realities and they have different demands, expectations, responsibilities & needs. For home-workers, internet practices are framed by workplace demands and the family members they live with. In households, they are framed within roles (partner and/or parent) and relationships (husband/wife and/or mother/father)

that people have with one another. For immigrants, internet practices are framed by the geographical distance from their close relationships, and the need to interact easily and inexpensively.

Consequently, my dissertation research offers a glimpse into the lives of Canadian home internet users and provides a case study of how they actively shape its domestication. The following section provides an overview of the different contexts discussed throughout this dissertation. I weave together the various threads of home internet acquisition, use and integration from chapters three, four and five to provide portraits of home internet users, and consider some of the wider social implications of the patterns that emerged throughout the research analyses.

Home-Workers: Contested Boundaries

How people conduct their paid work and where they do it is changing, and so are the expectations of today's worker: more paid work is brought home and carried out at home, and for some workers, it becomes difficult to treat home and work as absolutely demarcated categories (Kaufman-Scarborough, 2006; Nippert-Eng, 1996). The activities and practices of home-workers, as well as the ways in which they negotiate their home and work life to maintain balance and productivity differ depending how much of the work day is spent working at home. People who work at home, whether employee or self-employed, full, part or over-time, do their paid home work in the context of households, family and relationships. But, not all home-workers are the same. The amount of time people spend working at home – whether a few hours a week or a full work week – will have different effects on not only their work life, but also their personal lives and importantly, their home lives. As such, I

frame the discussion around different kinds of home workers, based on the percentage of their workday spent working at home: over-timers (1-15%), part-timers (16-50%) and full-timers (51-100%).

My findings in chapter three suggest that the workplace and the household intersect to shape a particular experience of acquisition and use. The interviews reveal that paid work is a key reason why they acquired the home internet. With previous home computers used for telework, it is not a far stretch that the internet would be an important motivator for acquisition, but initial uses seemingly change and develop as the internet is used more often and for different things. As well, the online search patterns of home-workers are contextual and contingent on the type of work they do and how much they work at home; the searches range from intensive academic or medical research, government census information to background investigating companies and clients. Moreover, the communication experiences of home-workers suggest that while the benefits of using the home internet to interact from home are obvious, there are also instances where these affordances can help further blur the boundaries between home and work spaces – with sometimes contested outcomes (Cropley & Millward 2009; Iles et al. 2009). However, as the stories imply, when public spaces creep into private domestic spaces, these initial home internet use may change and develop.

Despite the attempts of some home workers to separate work and home, the needs of family members surface and they must be attended to. Household spaces that have been designated as private work spaces are sometimes encroached upon by children and partners. Full-timers have blurrier boundaries between work and domestic life than part-timers and over-timers. While full-timers establish routines for their paid and unpaid work, their tasks are more converged than other home workers. While some full-timers carefully segregate

work time from domestic and family time, most disperse their tasks throughout the day, contrasting with over-timers who have much more separation between work and home. The more time people spend working at home, the more integrated, embedded, and blurred their work and family life becomes. Most importantly, the more time they work at home, the more time they spend with family members – for better or worse.

The number of people working at home is likely to continue increasing, whether by individual choice, organizational choice or the loss of organizational jobs leading to self-employment: the International Labour Organization projects a loss of 51 million jobs worldwide in 2009 (MacInnis 2009). Hence, it is important to consider the nature of home-work arrangements and the impact of these arrangements on work and domestic relationships as the blurring of home and work boundaries continue to converge. From a corporate standpoint, organizations need to realize that work at home (in part-time and full-time capacity) not only saves costs, but that the convergence of home and work life can foster productivity and alleviate work-family or family-work conflicts (Kossek & Ozeki 1999; Hayman 2009).

While employers may squirm at potential productivity pitfalls of such arrangements, the integration and blurring of home and work boundaries can be a positive factor, as home-workers can multi-task or attend to domestic situations as they arise, and the home internet facilitates these situations. However, as the interviews suggest, working at home can create permeable boundaries between the home and work spheres (Kurland & Bailey 1999). Attempts to integrate childcare and domestic work into the paid work day can lead to a breakdown of household routines or efforts to separate home and work (Kaufman-Scarborough 2006). Depending on how much work time is spent at home, conflict can ensue

if family members are forced to ignore their spouse or parents in the home during work hours (Kurland & Bailey 1999; Salaff 2002). Canadian health and labour ministries report a growing interest in both working at home, and in how work at home impacts employee stress and people's ability to manage their work and family lives. A 2001 study by Health Canada found that three times as many Canadians experienced high stress than they did in 1991, with two-thirds of Canadians experiencing "role overload" in their attempt to negotiate work and family responsibilities (Health Canada 2001). Indeed, while home internet offers numerous possibilities and affordances for home-workers, it is wise to consider the potential implications for home-workers and their family members when home and work boundaries converge and overlap (Chelsey 2005).

For home-workers, internet domestication encompasses the mediation of paid work, unpaid work and family relationships. My findings point the contentions in balancing public & private spheres in various capacities and suggest the importance of recognizing how mediating these boundaries is labour in itself – boundary work, that requires constant re/negotiation of paid work, spousal and parental roles and domestic responsibilities.

Canadian Immigrants: Transnational Experiences

As the internet gains acceptance as part of everyday life, it also gains the potential to transform everyday life in subtle ways. Canadians make choices about how they will use the internet, including the ways they can incorporate the internet into their cultural activities. Yet, little scholarly work has been done so far on how people use the internet to facilitate cultural practices online, or more specifically how Canadian immigrants utilize internet affordances for support and information (Salaff & Greve 2003; Salaff, Greve & Lu 2002).

Some have noted access barriers for First Nations (Singh 2004; Bredin 2001), and African Americans in the United States (Smith 2010a; Warren et al. 2010; Hecht et al. 2003), but none have investigated internet practices within their homes.

In keeping with my larger question about the practices involved in the social shaping of the domestic internet, I also investigated the home internet experiences and practices of Non-Canadian born East York participants. The interviews show how some immigrants take advantage of other types of internet communication, such as IM and video chats, to complement and enhance their conversations with friends and family far away (Senyurekli & Detzner 2009). The immediacy and added intimacy of these audio and visual chats, plays an important role in fostering these long distance relationships. Immigrant home internet users shape their communication patterns around these geographical distances (Chen 2010), but they are not constrained by the physical distance; they integrate synchronous and asynchronous online tools into their daily practices to share their experiences in creative ways.

Moreover, online information seeking by immigrant participants in East York suggested contextual internet searches that are shaped by their new life in Canada and a curiosity about their heritage. The internet offered material that was not only informational (such government forms or policy websites) but also contextual cultural information – both local and global. Immigrant participants look for online information about their home country to feel connected, to keep current, and to learn new things. They also sometimes share the information they find with friends and family both near and far. These examples – life situations – exemplify some of the contexts of people's online search patterns from home.

The stories told by East York immigrants reflect a particular locale that frames home internet domestication differently than Canadian born participants. Part of this is simply because many of the people they are close to live very far away, and the internet provides easy and inexpensive interactions, and also access to a plethora of knowledge and information – local and global. Importantly, they have a different expectations and experiences based on different social needs. This reinforces the significance of recognizing people's immediate social reality in shaping internet domestication.

Household Structure: Networked Families

With the onset of internet connectivity to household computers, and people's increasing access to the World Wide Web – mostly via dial-up through the landline - researchers probed internet adoption within in the home. The home developed into the central hub for internet use (Bakardjieva & Smith 2001), but households with higher incomes, more education and children showed higher rates of internet use and adoption (Hoffman, Kalsbeek & Novak 1996; Venkatesh 1996) with single mothers showing lower rates of internet adoption and use than partnered parents do (Bucy 2000; Attewell 2001; Hughes & Hans 2001; Lally 2002). As noted, few have examined home internet integration qualitatively, yet numerous media articles continue to purport problems with the internet and today's families, despite the mounting and interrelated changes in the composition of households; the life-cycle complexities of marriage and divorce, and decisions to have children or not (and how many) mean that today's households are varied, complex and evolving. Families in East York use the internet to mediate these complexities and shape the home internet to their varied needs. Families have changed in size and composition, as have

their lifestyles – yet people continue to think about ‘family’ in traditional monolithic ways. The additional concerns about the family and the internet further contribute to the moral panic; the internet is replacing family time and activities. I respond to these concerns by offering a perspective that shows families in constant communication with one another, and new and interesting ways to spend time together.

Context is often missing from the generalizations made about the internet and ‘the social decline of the family’. Arguments about the declining family are measured against ideologies about what a family should be, how much time they should spend together, and how they should spend their time when they are together. Traditional notions of family and family time (Oravec 2000; Watt & White 2000) constrain inventive ways that families may deal with external time constraints (Lanigan et al. 2009) or how they may use media and technologies as a collaborative practice. The shared online experiences with partners and children suggest that not only have families reconfigured how they spend their time together and what they do when they are together, but their household spaces have integrated the home internet, further shaping and framing the domestication process.

The structure of the household helps shape the domestication process – different family members with different needs and experiences (Berker et al. 2006). The interviews point to different experiences with the home internet across different kinds of households. For example, in households with only one internet access point, participants share stories about how internet access and use in the home is shaped by other household members; framed by notions of priority and need, each household member takes his or her turn at the home internet. These kinds of mediations within the home are missed when only looking at means and percentages. The needs of household members also persuades some people to

acquire additional computers with internet access; as the interviews reveal, acquiring computers with internet for their children often alleviates conflicts or struggles over internet time.

Moreover, looking more closely at household composition suggests that emailing from home is also often framed by the needs of family members. Here, household members not only connect to say hello when they are apart, but they also use email instrumentally for household tasks that need to be done and to facilitate various household schedules. Throughout the day, family members are networked in various ways (Rainie & Wellman 2012), and this depicts a very different perspective of today's families and the internet than what the media and research asserts (Kayany & Yelsma 2000).

Households also differ in the kinds of information they look for online and because of the ease and accessibility of the information, people can search for topics that suit their personal needs and the needs of their family members. I suggest that these needs are often situated within family and household; searching for household product information, travel and vacation information, helping children with homework, or searching for health information to alleviate concerns for the well being of family members. These examples propose the relevance of household composition – the presence of family members and the relationships between household members, such as mother and father or wife and husband – in the shaping of the domestic internet.

The Domestic Division of Digital Labour

The word 'domestic' itself is associated with unpaid work in the household or 'homemaking' that is divided by the different jobs women and men do (Habib & Cornford

2001). The household division of labour situates women as responsible for this domestic work (West & Zimmerman 1987), and this has not changed much across many decades (although men do more domestic work now than ever before). In considering the domestication of the internet, it is important to look at how the experiences of women and men might differ, and what this really means (Hartmann 2006). Because the word domestic encompasses traditional gendered roles of household tasks and chores, it is worthy to consider these meanings and how they may frame the domesticating process. Gender is important in household maintenance and how domestic work is allocated (Van Every 1997), and this applies to gendered internet uses.

Previous research suggests that women and men communicate online differently: women use the internet more socially than men do and women use the internet to communicate in ways that are framed by their domestic household roles. The survey data suggest that the number of hours spent online communicating from home, and the number of emails sent to household members, friends, relatives, and emails for work or school situates the home as nexus for online interaction in varying capacities - contextual communication experiences. Survey data may indeed tell us a mean number of emails sent, but qualitative data shed further light on not only what may be happening within the home, and the kinds of roles and responsibilities people have within these homes. In other words, the content and premise of these interactions move beyond the social to more instrumental, task oriented interactions framed by domestic roles and responsibilities.

Moreover, gendered roles within the home shape how the internet is used for information seeking; mothers search for online health information for their children suggesting how domestic responsibilities within the home – childcare provider – can shape

online searches. Women search for health, real estate, and travel information more often, whereas men search technology, sports, news, local and travel information more often. These differences suggest gendered practices within the home that frame online information searches and support my argument that domestication is socially shaped.

Women and men also have different time constraints and demands that are framed by gender roles in the household; women spend more time on domestic work and childcare than men. My survey data show that women do spend more time with children overall, they watch more television, do more recreational activities with them, and mothers spend more time online with their children than fathers do. As such, the process of domesticating a technology is different for women and men, and for women, internet integration is shaped by gendered domestic roles. Women are still primary caregivers to children and still responsible for domestics, and this is connected to how they integrate the home internet. Women mediate domestic responsibilities by emailing partners instrumental emails that act as a household to-do list, they search for health information for family members, healthy cooking & recipe suggestions, and children's activities and homework.

Mothers, wives, husbands and fathers utilize the domestic internet within the framework of family dynamics, and domestic technologies help women with daily chores and childcare. Importantly, this leads us to think about how the domestication of a technology can work to reproduce problematic gendered roles within households. Meaning that although technologies are neutral and people can actively choose how to use and integrate a technology, their actions are still framed by their social world – for women, mothering and motherhood. Here we should be wary of not only of reproducing gendered

practices, but also the potential for increased workloads with the prevalence of the home internet – more work for mother (Luxton 1980) or different work for mother?

Domestic Internets: Households without Borders

My research takes varying aspects of people's social worlds and connects them together. Each of these act as threads – different practices – that weave together and interact to shape how the internet is used and integrated as a domestic technology into today's households and families. I reframe the typical query of “how has the household internet has affected everyday life?” to include “how has everyday life affected the household internet? And, what does that ‘everyday’ look like?”

People use online communication tools from home to bridge the barriers of physical distance: full-time home-workers are more removed from the physical workplace and use email most often to connect with work and their own social circle; immigrants are away from close friends and family in their home countries and incorporate IM use into their day to share important life moments (or the everyday mundane); partners and parents are apart throughout the day as they attend to their own schedules and use email to keep the flow of the household routine going. The different contexts of work, heritage, and household reveal different frameworks that shape home internet communication and online information searches from home, yet in each circumstance there are varying needs and expectations (Kvasny 2006). Moreover, the flexibility of the internet allows people to show and share various things they find online with others inside their household, further shaping its integration into the home as a shared leisure activity.

My research reveals different aspects of the ‘social’ and how these intersect to reveal complex social realities within our homes. I suggest that although active agents, choices are framed within the context of these social realities and they have different demands, expectations, responsibilities & needs. For home-workers, internet practices are framed by workplace demands and family members. In households, they are framed within roles of partner and/or parent, and relationships of husband/wife and/or mother/father. For immigrants, internet practices are framed by the geographical distance of their close relationships, and the need to interact easily and inexpensively. I unravel the notion of ‘shaping’ to reveal how the internet practices of individuals in households are situated within different aspects of their social world. I also suggest that the shaping of internet domestication is a collective process that includes individual practices and also the involvement of other family members - both inside and outside the home. Domestication is a process of threading these intersecting aspects of our social world together, mediating them via the internet in creative ways, and weaving them to shape a home web.

Internet domestication reveals how networked individuals live and operate within networked families. They use the internet to bridge barriers of physical distance, challenging the boundaries between public and private life spaces. Households are not operating as traditional groups, but as social networks where individuals juggle their somewhat separate agendas and schedules – locally and globally. Reconfigured by socio-cultural changes and responding to the world around them, networked individuals may spend more time apart with family and friends than previous generations, but they use the internet to stay in contact throughout the day and are more connected than ever before. Rather than pulling households apart, internet domestication connects and networks family members, enabling them to

communicate and coordinate despite their mobile, individual lifestyles. Families are networked and they lead complex connected lives.

Future Considerations

Critical investigation and analysis should leave the researcher with additional questions for future research, with some reflexive thoughts on what could have been done differently or better. In this section I will briefly outline some future research considerations for home internet research that I propose in the continued study of internet domestication.

Future research considerations include using additional methodological tools. Although the Connected Lives study triangulates quantitative and qualitative data collection tools, a future study should consider methods that provide additional contextual data. One example is the use of time diaries, similar to the time diaries used by Bianchi, Robinson & Milkie (2007) in their study of American life. The use of time diaries provides a detailed look at the everyday mundane – from domestic chores, to paid work to leisure and family time. This, used in conjunction with notations (or inventory) about internet use would provide additional detail about how people spend their time (and constraints on their time), but also how people interweave the internet throughout the day for various purposes. Time Diaries would provide further detail of being always on, and account for multi-tasking (doing different things at once) & multi-plexing (doing the same task with various ICTs). I would also include additional online tools and media, and consider gaming practices; households increasingly have family members who game together on consoles and computers (ESA 2010).

Furthermore, interviews with each household members (together and separately) rather than one member of the household would provide further insight into domestication processes, and also the meaning and significance of the internet that families create and potentially contest individually and collectively (Lally 2002; Livingstone 1992). Of particular interest would be not only members under 18 (given there is always concern about what minors are really doing online), but also the relationships between household members and the home internet.

Moreover, longitudinal research would measure how internet practices and the importance of the internet might change over time and throughout the life course. Recall the initial feelings and research about the dystopian internet (Kraut et al. 1998) and the fear that it would replace or destroy our social relationships. While some of these arguments are still in debate, society has not fallen apart – the internet has not destroyed us. Instead, we see a daily development of new software and applications that people continue to integrate into their (home, work, school, volunteer group, leisure, social) routines. A longitudinal study would also further enhance our understanding of how the internet is used or what it can provide, the socio-cultural changes that are taking place, and what meaning people make of these changes. It would also provide a sense of short-term and long-term consequences and implications (positive or negative) on the individual and on the family. Importantly, this would further advance theory and conceptualization about certain patterns of internet behaviours (Glassner & Berg 1980).

While the Connected Lives survey has been replicated in some capacity in the United States and in rural Chapleau, Ontario, I would advocate for in-depth home interviews in different geographical locales. Surveys have pointed to the different technological constraints

and concerns of rural communities (Chen & Wellman 2004; LaRose et al. 2007; Morris 2009), yet few have conducted interviews, and none have explored rural internet domestication. We might also consider different cities and towns within Ontario and across Canada comparing by population size, and also internationally investigating internet domestication in different parts of the world. Although I advocate for a huge undertaking (and funding), this is the most effective way to understand the role of the internet in everyday lives (Selwyn 2003).

Since the last phase of East York data collection in 2005, the internet has become much more pervasive and inclusive in people's daily activities; social practices, leisure activities, workplace demands, educational expectations and more. In addition to methodological suggestions, I also suggest further conceptual depth to internet domestication research. Domestication of the internet develops as a set of contextual practices, and in my research I discussed three different social contexts that shape internet domestication: paid work, immigrant status, and household composition. There are however, additional social contexts and social institutions to consider. For example, some interview participants noted that they use the internet for religious information, and this supports Hack's (2007) research about the role of religion in internet domestication in London, England, pointing to additional contexts to consider with more depth (this was not probed during the interviews). Moreover, education also worth considering; the Vuojärvi et al. (2010) study shows how university students domesticate their personal laptops, and how students integrate the laptop into their personal educational experience. This, in conjunction with the immigrant status (Hijazi-Omari 2008) (non/Canadian born) that I discussed would provide further depth and detail about the shaping process within the home.

While I have noted how parents help their children with homework online, this warrants further exploration, as the internet continues to become more embedded within the educational system (Dykman & Davis 2008). For example, a study in 2000 found that 94% of teenagers used the internet for educational research (Lenhart et al. 2001). As online demands increase for students (whether youth or adult learning), it is important to think about how pedagogical changes in the educational system (Law 2009; McLoughlin 2011) might manifest within home internet use and what this means to parents and students.

The use of time-diaries that I suggested earlier would capture many of the contexts and nuances of that might be missed when interviewees are recalling home internet use, and these diaries would be particularly compelling in thinking about how current events – both global (such as the recent disaster in Japan and political upheaval in Egypt) and local (garbage strikes and votes of non-confidence) might also shape internet domestication (Kaye & Johnson 2010; Robbin & Buente 2008; Mossberger et al. 2008). At the time of writing, political campaigns are underway in Canada for a May election and the use of the internet and social media during this election is something Canada has not seen previously. As such, of interest would be how this (and news and events in general) may shape information seeking patterns within the home, and whether the information is shared and discussed with other household members (Smith 2008a).

My sociological learning process throughout my graduate studies has provided me with invaluable ways of seeing the world, asking critical questions, and unpacking things that are often taken for granted. These skills and the research area I have chosen have allowed me to teach and research in multiple disciplines. While my research is a sociological, it is also interdisciplinary, and theoretically and methodologically pertinent to cultural studies, media

and communication fields, leisure studies and women's studies in different ways with different foci. For example, in cultural studies my research contributes to previous work concerning television domestication by providing a deeper understanding of 'consumption practices' (Morely 1992) within the home that are shaped by paid work and immigration status, practices that are not always considered in these investigations. The lack of research about how internet domestication fits within the moral economy of the household (Lally 2002) warrants further qualitative inquiry.

As well, in the field of media and communication, my research further contributes to our understanding of media-multiplexity (Haythornthwaite 2001), and how different circumstances and needs shape the choices people make regarding internet communication. My research points to the relevance of culture or heritage (for example) and how immigrant participants utilize video messaging (both synchronously and asynchronously) so that they may feel connected to loved ones far away. Moreover, my research points to the increasing integration of the internet as a leisure activity with collaborative and social potential. The field leisure and recreation studies would further benefit from this kind of research by investigating the socio-cultural meanings that have been inscribed in digital leisure practices, and how these meanings can be problematic when we consider contexts of gender, race & ethnicity and class (Veblen 1899/2007).

Furthermore, my discussion of today's families and the sometimes gendered roles within today's households contributes to the field of feminist sociology and women's studies. My research explores the experiences of different kinds of family arrangements to uncover some of the dynamics of roles and relationships within the home. The experiences of women, who often shape their internet use around their role of wife and mother, leaves us with

further questions about the what digital parenting encompasses, and what it means to mothers. The domestication of the internet in today's households and families has situated digital parenting as challenging and exigent, and this also warrants further exploration.

Closing Thoughts: From *The Jetsons* to *The Netsons*

Discourses about the internet - in media and within research – remain quite linear, with no room for 'unintended consequences' (positive or negative) of internet integration. As new modes of using the internet continue become integrated into our lives over the lifespan, social concerns about the 'effects' of the internet on our lives remain persistent - often without considering the social contexts and how people actively construct their experiences with the internet. And, these do not always have to be negative or positive – but simply different.

In 1962, Hannah & Barbera offered a novel juxtaposition to their prehistoric hit *The Flintstones* – *The Jetsons*, set in the futuristic technological world of 2026. As a child I was fascinated by these visions of future domestic technologies, despite the traditional (problematic) gendered family roles. Between *The Jetsons* and *Star Trek*, my childhood was filled with technological promises of the future. Some of the domestic technologies in *The Jetsons* are still far in the future (our computer is not making us dinner), and our family roles and relationships have for the most part evolved beyond the stereotypical depiction of George and Jane. But other technologies – like Captain Kirk's communicator or George Jetson's video telephone - are eerily predictive of our current communication landscape. Our internet landscape has grown and evolved, and it is becoming increasingly pervasive and ubiquitous. This is certainly the case in my own life and home, and it has offered me an

interesting standpoint and perspective in researching internet domestication. Families today are less like *The Jetsons*; in fact households and families are more like *The Netsons*.

The Netsons, in theory, reflect diverse households, families, and individuals that have shaped the internet domestication process in different ways. In practice, *The Netsons* have embedded the internet into their daily lives, and my dissertation provides a case study of what this looks like in some East York households. Most recent research point to further developments at a time when more and more cell phones have become portable computing devices with internet access (smart phones such as iPhone, Android and BlackBerry), digital music (iTunes) and gaming devices (Nintendo DS), and new portable devices (such as NetBooks and iPads) all have wireless internet access. Paradoxically, mobile internet affords both individual and collaborative use and integration. Numerous smart phone applications have been created for domestic tasks (groceries and to-do lists) that can be shared by household members on their own internet devices. Moreover, educational applications for the iPhone and Android allow parents more creative tools to teach their children anything from reading and writing to cultural knowledge that is complemented with videos and aerial maps. And, entertaining applications allow parents to keep young children occupied via sight and sound when they are restless. Although these ways of utilizing the internet are typically gendered – cooking and culinary applications (such as the iPhone application: Top Chef Foodie Fight) are reflective of cultural politics in physical spaces (Johnston & Baumann 2010). However, these kinds of devices and applications have the potential to transgress and challenge traditional gender roles because they can be collaborative in practice.

The Netsons are also dealing with typical issues but in uncharted terrain. In homes with children, digital parenting (Rode 2009) has raised new concerns for parents in the

internet landscape (Smith 2011; Tripp 2011), such as punitive measures (e-grounding: Ludden 2010; Lenhart et al. 2010), and concerns about cell phones and teenagers “sexting” (Hilinski & Freiburger 2010; Pascoe 2011). Cell phones (and smart ones) are increasingly part of our ICT landscape (Oksman & Rautiainen 2003; Oksman 2006; Goggin 2006), but some researchers have problematized the use of Location Based Services (LBS) on mobile devices (Zhou 2011), citing safety and privacy issues, while others situate ICTs as an electronic leash or parental panopticonism (Boesen et al. 2010). Concerns about teenagers and the use of social media have also been raised, as parents navigate unfamiliar technological terrain (Yardi & Bruckman 2011), with parents and educators dealing with new ways of bullying (Subrahmanyam & Šmahe 2011) and sexual harassment framed around gendered ideologies (Welsh 1999). Media also posit concerns about video games and the amount of time youth spend gaming (Shin & Huh 2011). The list of concerns – and examples of ubiquitous internet - is seemingly endless with new parental apprehensions in the digital age (Nelson 2010). Nancy Baym perceives the consequences of technology (broadly) on social life as emergent. She notes: “Even if we knew all the factors that influence at the start (an impossible feat), we would not be able to precisely predict the social interactions, formations, and changes that result from their ongoing interplay as people use technologies in specific situations” (Baym 2010: 48). Parental practices in a Networked Society are continually reworked and renegotiated, and our social relationships are reconfigured in dynamic ways.

Relationships online have developed, more people are using the internet to meet and get to know people (Lambert 2009; Gibbs et al. 2011). The use of online dating sites the number of marriages between people who have met online continues to increase (Reuters

News 2010). Moreover, the senior population online (those over 65 years) continues to grow (Zickuhr 2011) as older people try their hand at the internet to communicate with family and find pertinent information (Lee et al. 2011; Madden 2011). The internet has even crept into our traditional media spaces; most television commercials now provide a website address so people can follow-up further, and some online genealogy services (ancestry.com) (Smith 2008b) tug at family emotions and curiosities by offering online services that will help them learn about their kin and connect with distant relatives – seemingly reinforcing the importance and value of family and relationships. Of notice in particular in the past year are the television commercials that have replaced their usual website addresses with a FaceBook web-address, suggesting the significance of social media in today’s world.

The contributions of my research attest to a multifaceted internet that acts as a complex web of networked information and communication processes, with sometimes uncertain and unexpected implications on many facets of people’s lives - individually and collectively. The numerous examples of how pervasive and ubiquitous the internet has become only reinforces the need for further contextual research about how different households and families shape their domestic internet. My curiosity continues: where will the Netsons go from here?

References

- Aguiar, M. & Hurst, E. (2007). Measuring Trends in Leisure: The Allocation of Time over Five Decades. *The Quarterly Journal of Economics*, MIT Press, Vol 122(3), 969-1006.
- Ahuja, M. K. (2002). Women in the information technology profession: A literature review, synthesis and research agenda. *European Journal of Information Systems*, Vol 11(1), 20-34.
- Akyeampong, E.B. & Nadwodny, R. (2001). Evolution of the Canadian workplace: Work from home. *Perspectives on Labour and Income*, Vol 2(9). Statistics Canada Catalogue no. 75-001-XIE. Retrieved from <http://bit.ly/msJzUD>
- Ammons, S. & Markham, W. (2004). Working at Home: Experiences of skilled white collar workers. *Sociological Spectrum*, Vol 24(2), 191-238.
- Alonso, A. & Oiarzabal, P. (2010). *Diasporas in the New Media Age: Identity, Politics, and Community*. Reno, Nevada: University of Nevada Press.
- Anderson, B. & Tracey, K. (2002). The Impact (or Otherwise) of the Internet on Everyday British Life. In B. Wellman & C. Haythornthwaite (Eds.), *The Internet in Everyday Life* (pp 139-163). Oxford: Blackwell Publishers.
- Anderson, B. (2003). The Domestication of Information and Communication Technologies. In K. Christensen & D. Levinson (Eds.), *The Encyclopaedia of Community: From the Village to the Virtual World*. Thousand Oaks, CA: Sage Publications.
- Anderson, B. (2008). The Social Impact of Broadband Household Internet Access. *Information, Communication & Society*, 11(1), 5- 24.
- Anderson, B., Gale, C., Jones, M. L. R., & McWilliam, A. (2001). Domesticating broadband – What consumers really do with flat-rate, always-on and fast Internet access. *BT Technology Journal*, Vol. 20(1), 103-114.
- Anderson, B., McWilliam, A., Lacohee, H., Clucas, E. & Gershuny, J. (1999). Family life in the digital home – domestic telecommunications at the end of the 20th century. *BT Technology Journal*, Vol 17(1), 85-97.
- Appiah, O. (2003). Americans online: Differences in surfing and evaluating race-targeted web sites by African American and European American users. *Journal of Broadcasting & Electronic Media*, 47(4), 537-555.
- Appiah, O. (2004). Effects of ethnic identification on web browsers' attitudes toward and navigational patterns on race-targeted sites. *Communication Research*, 13(3), 312-337.

- Armstrong, N.J. (1997). Negotiating the boundaries between 'home' and 'work': a case study of teleworking in New Zealand. In E. Gunnarsson (Ed), *Virtually Free? Gender, Work and Spatial Choice* (pp 175-200). Stockholm, Sweden: NUTEK.
- Aro, J. & Peteri, V. (2003). Constructing Computers at Home. Conference Paper, Association of Internet Researchers, Toronto, Ontario.
- Aspray, W. & Hayes, B. (2011). *Everyday Information: The Evolution of Information Seeking in America*. Boston, MA: MIT Press.
- Attewell, P. (2001). The First and Second Digital Divides. *Sociology of Education*, 74(3), 252-259.
- Aune, M. (1996). The Computer in Everyday Life: Patterns of Domestication of a New Technology. In M. Lie, M & K. Sørensen (Eds.) *Making Technologies Our Own? Domesticating Technology into Everyday Life* (pp 91-120). Scandinavian University Press: Oslo.
- Auter, P. (2007). Portable social groups: Willingness to communicate, interpersonal communication gratifications, and cell phone use among young adults. *International Journal of Mobile Communications*, Vol 5(2), 139-156.
- Baber, Z. (2005). *CyberAsia: the Internet and society in Asia*. Leiden, The Netherlands: Koninklijke Brill NV.
- Bacigalupe, G. & Lambe, S. (2011). Virtualizing Intimacy: Information Communication Technologies and Transnational Families in Therapy. *Family Process*, Vol 50 (1), 12-26.
- Baines, S. & Gelder, U. (2003). What is family friendly about the workplace in the home? The case of self employed parents and their children. *New Technology, Work and Employment*, Vol 18 (3), 223-234.
- Bakardjieva, M. & Smith, R. (2001). The Internet in Everyday Life: Computer Networking from the Standpoint of the Domestic User. *New Media and Society*, 3 (1), 67-83.
- Bakardjieva, M. (2005). *Internet Society: The Internet in Everyday Life*. London: Sage.
- Bakeri, A. & Bakar, A. (2011). Information Seeking Behaviours of Rural Women in Malaysia. *Library Philosophy and Practice*, No 461. Retrieved from <http://bit.ly/imvcsp>
- Baron, N. (2010). *Always On: Language in an Online and Mobile World*. New York, NY: Oxford University Press.

- Baron, N. & Campbell, E. (2010). Talking Takes Too Long: Gender and Cultural Patterns in Mobile Telephony. Conference Paper, Association of Internet Researchers. Retrieved from <http://bit.ly/m061Fh>
- Baron, N. & Ling, R. (2007). Emerging patterns of American mobile phone use: Electronically-mediated communication in transition. In G. Goggin & L. Hjorth (Eds.), *Mobile Media 2007* (chapter 23). Proceedings of an International Conference, University of Sydney.
- Baym, N., Zhang, Y. & Mei-Chen, L. (2004). Social Interactions across Media: Interpersonal Communication on the Internet, Face-to-Face, and the Telephone. *New Media & Society*, Vol 6(3), 299-318.
- Baym, N. (2010). *Personal Connections in the Digital Age*. Cambridge: Polity Press.
- Bell, C. & Newby, H. (1971). *Community Studies: An Introduction to the Sociology of the Local Community*. London: George Allen & Unwin Ltd.
- Bell, D. (1976). *The Coming of Post-Industrial Society*. New York: Basic Books.
- Bell, G. (2006). The age of the thumb: A cultural reading of mobile technologies from Asia. *Knowledge, Technology & Policy*, Vol 19(2), 41-57.
- Bender, T. (1978). *Community and Social Change in America*. Baltimore: Johns Hopkins University Press.
- Berg, A. (1994). A gendered socio-technical construction: the smart house. In C. Cockburn & R. Furst-Dilic (Eds.) *Bringing Technology Home: Gender and Technology in a Changing Europe* (pp 165 – 180). Philadelphia, PA: Open University Press.
- Berg, B. (1998) *Qualitative Research methods for the Social Sciences*. Boston: Allyn and Bacon.
- Berg, B. (2001). *Qualitative Research Methods for the Social Sciences*. Needham Heights: Allyn & Bacon.
- Berg, K. (2011). Health Management in the Age of the Internet. Doctoral Dissertation. University of Toronto, Faculty of Social Work.
- Berker, T., Hartmann, M., Punie Y. & Ward, K. (2006). *Domestication of Media and Technologies*. Maidenhead: Open University Press.
- Beshara, M., Hutchinson, A, & Wilson, C. (2010). Preparing meals under time stress. The experience of working mothers. *Appetite*, Vol 55(3), 695-700.

- Bianchi, S. (2009). What Gives When Mothers are Employed? Parental Time Allocation in Dual-Earner and Single-Earner Two-Parent Families. In D. Russell Crane & J. Hill (Eds.) *Handbook of Families & Work: Interdisciplinary Perspectives* (pp 305-330). Lanham, Maryland: University Press of America.
- Bier, M., Gallo, M., Nucklos, E., Sherblom, S. & Pennick, M. (1997). Personal Empowerment in the Study of Home Internet Use by Low-Income Families. *Journal of Research on Computing in Education*, Vol 30(2), 107-121.
- Bijker, W. & Law, J. (1992). *Shaping Technology/Building Society: Studies in Socio-Technical Change*. Cambridge, MA: MIT Press.
- Bijker, W. E., Hughes, T. P. & Pinch, T. J. (1987). *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. Cambridge, MA: MIT Press.
- Bimber, B. (2000). The Gender Gap on the Internet. *Social Science Quarterly*, Vol 81, 868-876.
- Birnholt, J. (2010). Adopt, adapt, abandon: Understanding why some young adults start, and then stop, using instant messaging. *Computers in Human Behavior*, Vol 26 (6), 1427-1433.
- Blumer J. G. & Katz, E. (1974). *The Uses of Mass Communication*. Newbury Park, CA: Sage
- Boase, J. & Wellman, B. (2006). Personal Relationships: On and Off the Internet. In A. Vangelisti & D. Perlman (Eds.), *Cambridge Handbook of Personal Relationships* (709-723). Cambridge: Cambridge University Press.
- Boase, J., Horrigan, J., Wellman, B. & Rainie, L. (2006). The strength of Internet Ties. Pew Internet & American Life Project. Retrieved from <http://bit.ly/kzL7xy>
- Boesen, J., Rode, J. A. & Mancini, C. (2010). The domestic panopticon: location tracking in families. In Proceedings of the 12th ACM international conference on Ubiquitous computing (UbiComp '10). ACM, New York, NY, USA, 65-74.
- Bogdan, R.C. & Biklen, S.K. (1992). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn & Bacon
- Boneva, B. & Kraut, R. (2002). Email, Gender and Personal Relationships. In B. Wellman and C Haythornthwaite (Eds.), *The Internet in Everyday Life* (pp 372-403). Oxford: Blackwell Publishers.
- Bradner, E., Kellogg, W. A. & Erickson, T. (1999). The Adoption and Use of 'Babble': A Field Study of Chat in the Workplace. Conference Paper, European Conference on Computer Supported Cooperative Work Copenhagen, Denmark, September.

- Brandon, B. (1980). *The effects of the demographics of individual households on their telephone usage*. Cambridge, MA: Ballinger.
- Bredin, M. (2001). Bridging Canada's Digital Divide: First Nations' Access to New Information Technologies. *The Canadian Journal of Native Studies*, XXI (2), 191-215.
- Bucy, P. (2000). Social Access to the Internet. *The Harvard International Journal of Press/Politics*, Vol 5(1), 50-61.
- Caidi, N., Longford, G. Allard, D. & D. Dechief. (2007). Including Immigrants in Canadian Society: What Role do ICTs Play? Draft Report Submission to the Strategic Policy Research Directorate of Human Resources and Social Development Canada (HRSDC), March 10, 2007. Retrieved from <http://bit.ly/ihiYQs>
- Carman, B. (2004). Cross-Tabulation of Quantitative Data. In C. Varkevisser, I. Pathmanathan & A. Brownlee (Eds.), *Designing and Conducting Health Systems Research Projects Volume II: Data analysis and report writing* (pp 51-64). Retrieved from <http://bit.ly/jqJ3e7>
- Castells, M. (2000). *The Rise of the Network Society. The Information Age: Economy, Society and Culture: Volume 1*. Malden: Blackwell.
- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Thousand Oaks, CA: Sage Publications.
- Chelsey, N. (2005). Blurring boundaries? Linking technology use, spillover, individual distress, and family satisfaction. *Journal of Marriage and Family*, 67, 1237-1248.
- Chesley, N. & Fox, B. (2010). Are Gender and Race Important Factors Shaping the Use and Consequences of Email to Family? Paper presented at the annual meeting of the American Sociological Association Annual Meeting, Atlanta. Retrieved from <http://bit.ly/lAC8WQ>
- Chen, W. (2006). The Impact of Internet Use on Transnational Entrepreneurship: The Case of Chinese Immigrants to Canada. In P. Luo, L Fortunati, S. Yang (Eds.), *New Technologies in Global Societies* (pp 197-220). Hackensack, NJ: World Scientific Publishing Co.
- Chen, W. (2010). Internet-usage patterns of immigrants in the process of intercultural adaptation. *Cyberpsychology, Behavior & Social Networking*, 13(4), 387-99.
- Chen, W. & Wellman, B. (2004). Charting Digital Divides: Comparing Socioeconomic, Gender, Life Stage, and Rural-Urban Internet Access and Use in Five Countries. In W. Dutton, B. Kahin, R. O'Callaghan, & A. Wyckoff (Eds.), *Transforming Enterprise* (pp 467- 497). Cambridge MA: MIT Press.

- Chen, Y. F. & Lever, K. (2006). Teledensity: A Study of Gender Differences in the Use of Mobile Communication Technology on a College Campus. Conference Paper, International Communications Association 56th Annual Conference, Dresden.
- Cheong, P. & Poon, J. (2009). Weaving Webs of Faith: Examining Internet Use and Religious Communication among Chinese Protestant Transmigrants. *Journal of International and Intercultural Communication*, Vol 2(3),189 - 207.
- Choudhury, N. (2009). How are women fostering home Internet adoption? A study of home-based female Internet users in Bangladesh. *TripleC - Cognition, Communication, Cooperation*, Vol 7(2). Retrieved from <http://bit.ly/kWa8aw>
- Christensen, T. K. (2009). 'Connected presence' in distributed family life. *New Media & Society*, Vol 11(3), 433-451.
- Clemens, R. G. & Cushing, A. L. (2010). Beyond everyday life: Information seeking behavior in deeply meaningful and profoundly personal contexts. *Proceedings of the American Society for Information Science and Technology*, 47, 1-10.
- Clement, A., Aspinall, J., Viseu, A. & Kennedy, T. (2004). Public access, personal privacy and media interweaving in everyday internet experiences: exploring current policy concerns via a 'neighbourhood ethnography'. In M. Moll & L. R. Shade (Eds.), *Seeking Convergence in Policy and Practice: Communications in the Public Interest Volume II* (pp 245-282). Ottawa, ON: Canadian Centre for Policy Alternatives.
- Clement, A., Moll, M., & Shade, L.R. (2000). Debating Universal Access in the Canadian Context: The Role of Public Interest Organizations. In M. Moll and L.R. Shade (Eds.), *Ecommerce vs. E-commons: Communications in the Public Interest* (pp 23-48). Ottawa, ON: Canadian Centre for Policy Alternatives.
- Cole, J. I., M. Suman, P. Schram, D. Van Bel, B. Lun, P. Maguirre, K. Hanson, R. Singh & Aquino, J. S. (2000). Surveying the Digital Future. Los Angeles, CA: UCLA Center for Communication Policy. Retrieved from <http://bit.ly/ifqr1r>
- Collins, F. (2009). Connecting 'Home' With 'Here': Personal Homepages in Everyday Transnational Lives. *Journal of Ethnic and Migration Studies*, Vol 35(6), 839-859.
- Collins, P. H. (1994). Shifting the Center: Race, Class, and Feminist Theorizing about Motherhood. In E. Nakano Glenn, G. Chang & L. R. Forcey (Eds.), *Mothering: ideology, experience, and agency* (pp 45-66). New York, NY: Routledge.
- Cooper, J. (2006). The digital divide: The special case of gender. *Journal of Computer Assisted Learning*, 22, 320-334.
- Cowan, R.S. (1983). *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave*. New York: Basic Books.

- Cowdery, R. & Knudson-Martin, C. (2005). The Construction of Motherhood: Tasks, Relational Connection, and Gender Equality. *Family Relations*, Vol 54(3), 335-345.
- Cropley, M. & Millward, L. (2009). How do individuals 'switch-off' from work during leisure? A qualitative description of the unwinding process in high and low ruminators. *Leisure Studies*, Vol 28 (3), 333-347.
- Cumming, J. & Kraut, R. (2001). Domesticating Computer and the Internet. *The Information Society*. Retrieved from <http://bit.ly/iVzqZr>
- Cushing, P.J. (1996). Gendered Conversational Rituals on the Internet: An Effective Voice is Based on More than Simply What One is Saying. *Anthropologica*, 38, 1, 47-80.
- Dechief, D., Longford, G., Powell, A. & Werbin, K. (2008). Enabling communities in the networked city: ICTs and civic participation among immigrants and youth in urban Canada. In A. Aurigi & F. De Cindio (Eds.), *Augmented urban spaces: articulating the physical and electronic city* (pp 155-170). Burlington, VT: Ashgate Publishing Ltd.
- De Haan, J. & Huysmans, F. (2002). Differences In Time Use Between Internet Users and Nonusers In The Netherlands. *IT and Society*, Vol 1(2), 67-85.
- De Vaus, D. (2002). *Surveys in Social Research*. London: Sage.
- Denzin, N. (1970). *The Research Act in Sociology*. Chicago: Aldine.
- Denzin, N. K. & Lincoln, Y. S. (2003). *Collecting and Interpreting Qualitative Materials* (2nd Ed). Thousand Oaks, CA: Sage.
- Diamond, C. (2004). Gender equity, work-family conflict and telework, Paper presented at The Association of Industrial Relations Academic of Australia and New Zealand, Noosa, Australia.
- Dickson, P. & Ellison, J. (2000). Plugging In: The Increase of Household Internet Use Continues into 1999. *Statistics Canada Report*, Connectedness Series. Retrieved from <http://bit.ly/iNgz40>
- Dryburgh, H. (2001). Changing Our Ways: Why and How Canadians use the Internet. *Statistics Canada Report*. Retrieved from <http://bit.ly/iAhCfs>
- Durkheim, E. (1933). *The division of labour in society*. New York: Macmillan.
- Dutton, W., Rogers, E.M. & Jun, S. (1987). Diffusion and Social Impacts of Personal Computers. *Communication Research*, 14(2), 219-50.

- Dykman, C. & Davis, C. (2008). Part One--The Shift toward Online Education. *Journal of Information Systems Education*, Vol 19(1), 11-16.
- Ebo, B. (1998). *Cyberghetto or Cybertopia: Race, Class and Gender on the Internet*. London: Praeger.
- Edge, D. (1988). The Social Shaping of Technology. *PICT Working Paper No. 1*, Edinburgh University.
- Elias, N. & D. Lemish. (2009). Spinning the web of identity: the roles of the internet in the lives of immigrant adolescents. *New Media & Society*, Vol 11(4), 533-551.
- Elliott, B. (1988). *Technology and Social Process*. Edinburgh: Edinburgh University Press.
- Facer, K., Sutherland, R., Furlong, R. & Furlong, J. (2001). What's the Point of Using computers? The Development of Young People's Computer Expertise in the Home. *New Media and Society*, Vol 3(2), 199-219.
- Entertainment Software Association. (2010). Essential Facts about the Computer and Video Game Industry. Retrieved from <http://bit.ly/q5YLCw>
- Fagan, C. (2001). The temporal reorganization of employment and the household rhythm of work schedules: The implications for gender and class relations. *American Behavioral Scientist*, Vol 44 (7), 1199-1212.
- Fallows, D. (2004). The Internet and Daily Life. Pew Internet & American Life Project. Retrieved from <http://bit.ly/17K1hi>
- Fallows, D. (2008). Search Soars, Challenging Email as a Favorite Internet Activity. Pew Internet and American Life Project Report. Retrieved from <http://bit.ly/m7WDzx>
- Fischer, C. (1992). *America Calling: A Social History of the Telephone to 1940*. Berkeley: University of California Press.
- Fong, E., Cao, X. & Chan, E. (2010), Out of Sight, Out of Mind? Patterns of Transnational Contact among Chinese and Indian Immigrants in Toronto. *Sociological Forum*, 25, 428–449.
- Fortunati, L. (2001). The mobile phone: an identity on the move. *Personal and Ubiquitous Computing*, Vol 5, 85-98
- Fox, S. & Rainie, L. (2002). Vital Decisions: A Pew Internet Health Report. Pew Internet & American Life Project. Retrieved from <http://bit.ly/muYnh4>
- Fox, S. & Jones, L. (2009). The Social Life of Health Information. Pew Internet & American Life Project. Retrieved from <http://bit.ly/kiFfeT>

- Fox, S. (2004). Older Americans and the Internet. Pew Internet & American Life Project. Retrieved from <http://bit.ly/l8enxM>
- Fox, S. (2006). Seeking Health Online. Pew Internet & American Life Project. Retrieved from <http://bit.ly/jJNadA>
- Fox, S. (2008). E-Patients: Chronically Ill Seek Health Information Online. Pew Internet & American Life Project. Retrieved from <http://bit.ly/iszHmV>
- Frissen, F. (2000). ICTs in the Rush Hour of Life. *The Information Society*, Vol 16(1), 65-77.
- Frissen, V. (1992). Trapped in electronic cages? Gender and new information technologies in the public and private domain: an overview of research. *Media, Culture & Society*, Vol 14, 31-49.
- Frohlich, D. & Kraut, R. (2002). The social context of home computing. Inside the Smart Home. HCI Institute, Carnegie Mellon University. Retrieved from <http://bit.ly/l8bcrU>
- Frohlich, D., Dray, S. & Silverman, A. (2001). Breaking up is hard to do: Family Perspectives on the Future of the Home PC. *International Journal of Human-Computer Studies*, No.54, 701-24.
- Fu, S., Wang, R. & Qiu, Y. (2002). Daily Activity and Internet Use in Dual-Earner Families: A Weekly Time-Diary Approach. *It & Society*, Vol 1(2), 37-43.
- Fuchs, C. & Horak, E. (2008). Africa and the digital divide. *Telematics and Informatics*, Vol 25(2), 99-116.
- Garret, R. & Danziger, J. (2008). IM = Interruption Management? Instant Messaging and Disruption in the Workplace. *Journal of Computer Mediated Communication*, Vol 13 (1), 23-42.
- Gajendran, R. S. & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, Vol 92, 1524-1541.
- Gershuny, J. (2003). Web Use and Net Nerds: A Neofunctionalist Analysis of the Impact of Information Technology in the Home. *Social Forces*, Vol 82(1), 141-168.
- Gibbs, J., Ellison, N. & Lai, C. (2011). First Comes Love, Then Comes Google: An Investigation of Uncertainty Reduction Strategies and Self-Disclosure in Online Dating. *Communication Research*, Vol 38(1), 70-100.
- Gibson, J. (1977). The Theory of Affordances. In R. E. Shaw & J. Bransford (Eds.), *Perceiving, Acting, and Knowing: Toward an Ecological Psychology* (pp 67-82). Hillsdale, NJ: Lawrence Erlbaum Associates.

- Glaser, B. (1992). *Basics of grounded theory analysis*. Mill Valley, CA: Sociology Press.
- Glaser, B. (2003). *The Grounded Theory Perspective II: Description's Remodeling of Grounded Theory Methodology*. Mill Valley, CA: Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Glavin, P. Schieman, S. & Reid, S. (2010). Boundary-Spanning Work Demands and Their Consequences for Guilt and Psychological Distress. *Journal of Health & Social Behavior*, Vol 52 (1), 43-57.
- Goggin, G. (2006). *Cell phone culture: Mobile technology in everyday life*. New York: Routledge.
- Goldfarb, A. & Prince, J. (2007). Internet adoption and usage patterns are different: Implications for the digital divide. *Information Economics and Policy*, Vol 20(1), 2-15.
- Gross, E. (2004). Adolescent Internet use: What we expect, what teens report. *Applied Developmental Psychology*, 25, 633–649.
- Gurstein, P. (2001). *Wired To The World, Chained To The Home: Telework In Daily Life*. Vancouver: University of British Columbia.
- GVU User Survey (1994). Retrieved from <http://bit.ly/jsJkcU>
- Habib, L. & Cornford, T. (2001). Computers in the Home: Domestic Technology and the Process of Domestication. Conference Paper, European Conference on Information Systems, Bled, Slovenia.
- Habib, L. & Cornford, T. (2002). Computers in the home: Domestication and gender. *Information Technology and People*, Vol 15(2), 159-174.
- Hack, J. (2007). *Taming Technology: Ultra-Orthodox Jewish Families and their Domestication of the Internet*. Dissertation submitted to the Department of Media and Communications, London School of Economics and Political Science.
- Haddon, L. & Silverstone, R. (1993). Teleworking in the 1990s: A View from the Home. *SPRU/CICT Report Series*, No.10, University of Sussex, Falmer.
- Haddon, L. & Skinner, D. (1991). The Enigma of the Micro: Lessons from the British Home Computer Boom. *Social Science Computer Review*, Vol 9(3), 435-49.

- Haddon, L. (1992). Explaining ICT consumption: The case of the home computer. In R. Silverstone & E. Hirsch (Eds.), *Consuming technologies: Media and information in domestic spaces* (pp 82-96). London: Routledge
- Haddon, L. (1995). Information and Communication Technologies: A View from the Home. Conference paper, PICT International Conference on the Social and Economic Implications of Information and Communication Technologies, Westminster, London.
- Haddon, L. (1999). Gender and the Domestication of the Home Computer: A Look Back. In W.H. Dutton (Ed.), *Society on the Line: Information Politics in the Digital Age* (pp 353-54). New York: Oxford University Press.
- Haddon, L. (2004). *Information and Communication Technologies in Everyday Life: A Concise Introduction and Research Guide*. Oxford: Berg.
- Hafner, K. (2003. December 11). If the Kitchen's Warm, It may be the PC. *New York Times*.
- Hammill, L. (2000). The introduction of new technology into the household. *Personal Technology*, 4(1),54-69
- Hampton, K. (2001). Living the Wired Life in the Wired Suburb: Netville, Glocalization and Civic Society, Doctoral dissertation, Department of Sociology, University of Toronto.
- Hampton, K. & Wellman, B. (1999). Living Networked On and Off Line. *Contemporary Sociology*, 28, 648-54.
- Hargittai, E. & Hinnant A. (2008). Digital Inequality: Differences in Young Adults' Use of the Internet. *Communication Research*, 35(5), 602-621.
- Hargittai, E. (2002). Second-Level Digital Divide: Differences in People's Online Skills. *First Monday*, Vol 7(4). Retrieved from <http://bit.ly/mSbNG6>
- Hargittai, E. (2006). Hurdles to Information Seeking: Spelling and Typographical Mistakes During Users' Online Behavior. *Journal of the Association for Information Systems*, Vol 7(1), Article 1.
- Hargittai, E. (2008). Digital Inequality: Differences in Young Adults' Use of the Internet. *Communication Research*, Vol 35(5), 602-621
- Hargittai, E. (2010). Digital Na(t)ives? Variation in Internet Skills and Uses among Members of the Net Generation. *Sociological Inquiry*, Vol 80(1), 92-113.
- Hargittai, E. & Shafer, S. (2006). Differences in actual and perceived online skills: The role of gender. *Social Science Quarterly*, 87(2), 432-448.

- Harper, R. (2000). Special issue on domestic computing. *Personal Technology*, 4(1), 1–69.
- Hartmann, M. (2006). The triple articulation of ICTs. Media as technological objects, symbolic environments and individual texts. In T. Berker, M. Hartmann, Y. Punie, & K. Ward (Eds.), *Domestication of Media and Technologies* (pp. 80-102). Maidenhead: Open University Press.
- Hayman, J. (2009). Flexible work arrangements: exploring the linkages between perceived usability of flexible work schedules and work/life balance. *Community, Work & Family*, 12 (3), 327-338.
- Haythornewaite, C. & Kazmer, M.M. (2002). Bringing the Internet Home: Adult Distance Learners and Their Internet, Home and Work worlds. In B. Wellman & C. Haythornthwaite (Eds.), *The Internet in Everyday Life* (pp 431-463). Oxford: Blackwell.
- Haythornthwaite, C. & B. Wellman. (1998). Work, Friendship, and Media Use for Information Exchange in a Networked Organization. *Journal of the American Society for Information Science*, 49 (12), 1101- 1114.
- Haythornthwaite, C. (2001). Exploring Multiplexity: Social Network Structures in a Computer Supported Distance Learning Class. *Information Society*, Vol 17(3), 211-226.
- Health Canada. (2009). Work-life conflict in Canada in the new millennium: Key findings and recommendations from the 2001 national work-life conflict study. Retrieved from <http://bit.ly/iQZGOJ>
- Healy, J. (1999). *Statistics* (Fifth Edition). Kentucky: Wadsworth Publishing Co.
- Hecht, M. L., Jackson II, R. L., & Ribeau, S. A. (2003). *African American communication: Exploring identity and culture*. Mahwah, NJ: Lawrence Earlbaum Associates.
- Henwood, F. (1993). *Gendered by Design? Information Technology and Office Systems*. London: Taylor & Francis.
- Herring, S. (1994). Posting in a Different voice: Gender and Ethics in Computer- Mediated Communication. In C. Ess (Ed.), *Philosophical Perspectives on Computer-Mediated Communication* (pp. 241-265). Albany: SUNY Press.
- Herring, S. (1996). Gender and Democracy in Computer-Mediated Communication. In R. Kling (Ed.), *Computerization and Controversy* (pp 476-89). San Diego: Academic Press.
- Herring, S. (2000). Gender Differences in CMC: Findings and Implications. *CPSR Journal*, 18 (1). Retrieved from <http://bit.ly/jAOff7>

- Hijazi-Omari, H. & Ribak, R. (2008). Playing with fire: On the domestication of the mobile phone among Palestinian teenage girls in Israel. *Information, Communication & Society*, Vol 11(2), 149-166.
- Hjorth, L. (2005). Postal presence: A study of mobile customization and gender in Melbourne. In P. Glotz & S. Bertschi (Eds.), *Thumb culture: Social trends and mobile phone use* (pp. 53-66). Bielefeld: Transcript Verlag.
- Hilinski, C. M. & Freiburger, T. (2010). An Exploratory Analysis of the Prevalence of Teen Sexting. Conference Paper, ASC Annual Meeting, San Francisco, California. Retrieved from <http://bit.ly/mCFAZ5>
- Hochschild, A. (1997). *The time bind: When work becomes home and home becomes work*. New York: Metropolitan Books.
- Hochschild, A. & Machung, A. (1989). *The second shift: Working parents and the revolution at home*. New York: Viking Penguin.
- Hogan, B. (2009). Networking in Everyday Life. Doctoral Dissertation, Department of Sociology, University of Toronto.
- Hoffman, D., Kalsbeek, W. & Novak, T. (1996). Internet and Web Use in the U.S. *Communications of the ACM*, Vol 39(12), 36-46.
- Hoffman, D. & Novak, T. (1998). Bridging the Racial Divide on the Internet. *SCIENCE*, Vol 280, 390-391.
- Horst, H. & Miller, D. (2006). *The Cell Phone: An Anthropology of Communication*. New York: Berg Publishers.
- Howard, L., Rainie, L. & Jones, S. (2001). Days and Nights on the Internet: The Impact of a Diffusing Technology. *American Behavioral Scientist*, Vol 45(3), 383-404.
- Hughes, R. Jr. & Hans, J.D. (2001). Computers, the Internet, and Families: A Review of the Role New Technology Plays in Family Life. *Journal of Family Issues*, Vol 22(6), 778-792.
- Hui, S. (2010). B.C. government lowers targets for First Nations broadband Internet access. *Straight: Vancouver's Online Source*. Retrieved from <http://bit.ly/iCjT58>
- Hynes, D. (2009). [End] Users as Designers: The Internet in Everyday Life in Irish Household. *Anthropology in Action*, Vol 16(1), 18-29.
- Igarashi, T., Takai, J., & Yoshida, T. (2005). Gender differences in social network development in mobile phone text messages: A longitudinal study. *Journal of Social and Personal Relationships*, Vol 22(5), 691-713.

- Iliev, R., Wilson, K. & Wagner, D. (2009). The Spillover of Daily Job Satisfaction onto Employees' Family Lives: The Facilitating Role of Work-Family Integration. *The Academy of Management Journal*, Vol 52(1), 87-102.
- Ipsos-Reid (2002). The Internet Is Shaping The Way In Which Canadian Families Live And Work Together. Retrieved from <http://bit.ly/ilFOG4>
- Ito, M. (2001). Mobile Phones, Japanese Youth, and the Re-Placement of Social Contact. Conference Paper. Annual Meeting for the Society for the Social Studies of Science. Cambridge, MA. Retrieved from <http://bit.ly/mK3yEI>
- Ito, M., Okabe, D. & Matsuda, M. (2005). *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*. Cambridge: MIT Press.
- Jackson L., Ervin, K., Gardner, P. & N. Schmitt. (2001a). Gender and the Internet: Women Communicating and Men Searching. *Sex Roles*, Vol 44(5), 363-379.
- Jackson, L. A., Ervin, K. S., Gardner, P. D., & Schmitt, N. (2001b). The racial digital divide: Motivational, affective, and cognitive correlates of internet use. *Journal of Applied Social Psychology*, 31(10), 2019-2046.
- Jackson, L. A., Barbatsis, G., von Eye, A., Biocca, F., Zhao, Y., & Fitzgerald, H. (2002). Internet use in low-income families: Implications for the digital divide. *IT & Society*, 1(5), 141-165.
- Jackson, L., Zhao, Y., Kolenic, A., Fitzgerald, H., Harold, R. & Von Eye, A. (2008). Race, Gender, and Information Technology Use: The New Digital Divide. *CyberPsychology & Behavior*, Vol 11(4), 437-442.
- Jacobs, J.A., & Gerson, K. (2001). Overworked individuals or overworked families? Explaining trends in work, leisure, and family time. *Work and Occupations*, Vol 28(1), 40-63.
- Jennings, N., & Wartella, E. (2004). Technology and the family. In A. L. Vangelisti (Ed.), *Handbook of Family Communication* (pp 593-608). Mahwah, NJ: Erlbaum.
- Jenson, K. (2002). *A Handbook of Media and Communication Research: Qualitative and Quantitative Methodologies*. New York: Routledge.
- Johnson, L.C., Andrey, J. & Shaw, S. (2007). Mr. Dithers comes to dinner: Telework and the merging of women's home and work domains. *Gender, Place and Culture* Vol 14(2), 141-161.
- Johnston, J. & Baumann, S. (2010). *Foodies: Democracy and Distinction in the Gourmet Foodscape*. New York: Routledge.

- Jones, S. & Fox, S. (2009). Generations Online in 2009. Pew Internet & American Life Project. Retrieved from <http://bit.ly/mNX0s4>
- Jones, S., Johnson-Yale, C., Millermaier, S & Seoane Pérez, F. (2009). U.S. College Students' Internet Use: Race, Gender and Digital Divides. *Journal of Computer-Mediated Communication*, Vol 14(2), 244-264.
- Katz, V. (2010). How Children of Immigrants Use Media to Connect Their Families to the Community: The case of Latinos in South Los Angeles. *Journal of Children and Media*, Vol 4(3), 298 - 315.
- Katz J. & Rice, R. (2002). *Social consequences of internet use: access, involvement and interaction*. Cambridge, MA: MIT Press
- Kaufman-Scarborough, C. (2006). Time use and the impact of technology: Examining workspaces in the home. *Time and Society*, 15(1), 57-80.
- Kayany, J. M., & Yelsma, P. (2000). Displacement effects of online media in the socio-technical contexts of households. *Journal of Broadcasting & Electronic Media*, Vol 44, 215-232.
- Kaye, B. & Johnson, T. (2010). Weblogs as a Source of Information about the 2003 Iraq War. *Journal of Global Mass Communication*, Vol 4 (1-4), 291-302.
- Kennedy, T. (2007). Working @ Home: Negotiating Space & Place. In Y.Washida & S.van der Graaf (Eds.), *ICTs and Emerging Business Practices* (pp 257-279). Hershey, PA: Idea Publishing Group.
- Kennedy, T. & Wellman, B. (2007). Networked Households. *Information, Communication and Society*, Vol 10(5), 644-669.
- Kennedy, T., Smith, A., Wells, A. T. & Wellman, B. (2008). Networked Families. Pew Internet & American Life Project. Retrieved from <http://bit.ly/j09EEJ>
- Kennedy, T., Wellman, B., & Klement, K. (2003). Gendering the digital divide. *IT and Society*, 1(5), 149-172.
- Kiesler, S., Zdaniuk, B., Lundmark, V. & Kraut, R. (2000). Troubles with the Internet: The dynamics of help at home. *Human-Computer Interaction*, Vol 15, 322-351.
- Kimmel, J. & Connelly, R. (2007). Mothers' Time Choices: Caregiving, leisure, home production and paid work. *The Journal of Human Resources*, Vol 1222(3), 969-1006.
- Klein, H. & Kleinman, D. (2002). The Social Construction of Technology: Structural Considerations. *Science, Technology, & Human Values*, Vol 27(1), 28-52.

- Kossek, E.E. & Ozeki, C. (1999). Bridging the work-family policy and productivity gap: A Literature review. *Community, Work & Family*, 2(1), 7-32.
- Kraut, R., Mukhopadhyay, T., Szczypula, J., Kiesler, S., & Scherlis, B. (1997). Communication and information: Alternative uses of the Internet in households. Conference Paper. *Human Factors in Computing Systems*, Vol 1, 368-375.
- Kraut, R., Mukhopadhyay, T., Szczypula, J., Kiesler, S. & Scherlis, B. (1999). Information and Communication: Alternative Uses of the Internet in Households. *Information Systems Research*, Vol 10(4), 287-303.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53, 1017–1031.
- Kraut, R., Scherlis, W., Mukhopadhyay, T., Manning, J. & Kiesler, S. (1996). The HomeNet Field Trial of Residential Internet Services. *Communications of the ACM*, Vol 39(2), 55-65.
- Kurasaki, K. (2000). Intercoder Reliability for Validating Conclusions Drawn from Open-Ended Interview Data. *Field Methods*, Vol 12 (3), 179-194.
- Kurland, N.B. & Bailey, D.E. (1999). The advantages and challenges of working here, there, anywhere and anytime. *Organizational Dynamics*, 28(2), 53-68.
- Kvasny, L. (2006). Let the sisters speak: Understanding information technology from the standpoint of the 'other'. *Advances in Information Systems*, Vol 37(4), 13-25.
- Lacohée, H. & Anderson, B. (2000). Interacting with the telephone. *International Journal of Human-Computer Studies*, Vol 53(5), 665-699.
- Lahtinen, H. (2000). On Purchasing a Home Computer. In A. Sloane & F.van Rijn (Eds.) *Home Informatics and Telematics: Information, Technology and Society* (pp 191-204). Norwell, MA: Kluwer Academic Publishers.
- Lally, E. (2002). *At Home with Computers*. Oxford: Berg.
- Lambert, F. (2009). Online community information seeking: The queries of three communities in Southwestern Ontario. *Information Processing & Management*, Vol 46 (3), 343-361.
- Lanigan, J., Bold, M. & Chenoweth, L. (2009). Computers in the Family Context: Perceived Impact on Family Time and Relationships. *Family Science Review*, Vol14, 16-32.

- LaRose, R., Gregg, J., Strover, S., Straubhaar, J. & S. Carpenter. (2007). Closing the rural broadband gap: Promoting adoption of the Internet in rural America. *Telecommunications Policy*, Vol 31(6-7), 359-373.
- Law, N. (2009). Mathematics and science teachers' pedagogical orientations and their use of ICT in teaching. *Education and Information Technologies*, Vol 14 (4), 309-323.
- Lee, B., Chen, Y. & Hewitt L. (2011). Age differences in constraints encountered by seniors in their use of computers and the internet. *Computers in Human Behavior*, Vol 27(3), 1231-1237.
- Lee, D. H. (2004). Is there a Gender Difference in Mobile Phone Uses? Proceedings of the Conference 'Mobile Communication and Social Change, 18th-19th October, Seoul, Korea.
- Lehtonen, T. (2003). The Domestication of New Technologies as a Set of Trials. *Journal of Consumer Culture*, Vol 3(3), 363-385.
- Leiner, B., Cerf, V., Clark, D., Kahn, R., Leinrock, L., Lynch, A. Postel, J., Roberts, L. & Wolff, S. (2003). A Brief History of the Internet. *Internet Society*. Retrieved from <http://bit.ly/iX9RE8>
- Lemish, D. & Cohen, A. (2005). On the gendered nature of mobile phone culture in Israel. *Sex Roles*, Vol 52 (7/8), 511-521.
- Lenhart, A. (2002). Teenage Life Online: Youth and Instant Messaging. Pew Internet & American Life Project. Retrieved from <http://bit.ly/l8nYdL>
- Lenhart, A., Ling, R., Campbell, S. & Purcell, K. (2010). Teens and Mobile Phones. Pew Internet & American Life Project. Retrieved from <http://bit.ly/mlKQLE>
- Lenhart, A., Madden, M. & Hitlin, P. (2005). Teens and Technology: Youth are Leading the Transition to a Fully Wired and Mobile Nation. Pew Internet & American Life Project. Retrieved from <http://bit.ly/kF8k0h>
- Lenhart, A., Simon, M. & M. Graziano. (2001). The Internet and Education. Pew Internet & American Life Project. Retrieved from <http://bit.ly/k8ml0a>
- Lenhart, A. & Lewis, O. (2001). Teenage Life Online: The Rise of the Instant-Message Generation and the Internet's Impact on Friendships and Family Relationships. Pew Internet and American Life Project. Retrieved from <http://bit.ly/lp1Znl>
- Leung, L. & Wei, R. (2000). More than just talk on the move: Uses and Gratifications of the Cellular Phone. *Journalism & Mass Communication Quarterly*, Vol 77(2), 308-320.

- Licoppe, C. (2004). 'Connected presence': the emergence of a new repertoire for managing social relationships in a changing communications technoscape. *Environment and planning D: Society and space*, Vol 22, 135 - 156.
- Lie, M. & Sorensen, K. (1996). *Making Technology Our Own? Domesticating Technology into Everyday Life*. Oslo: Scandanavian University Press.
- Lim, S. (2008). Technology Domestication in the Asian Homestead: Comparing the Experiences of Middle Class Families in China and South Korea. *East Asian Science, Technology and Society: An International Journal*, Vol 2 (2), 189-209.
- Lim, S. & Soon, C. (2010). The influence of social and cultural factors on mothers' domestication of household ICTs – Experiences of Chinese and Korean women. *Telematics and Informatics*, Vol 27(3), 205-216.
- Ling, R. (2004). *The Mobile Connection: The cell phone's impact on society*. Morgan Kaufmann: San Francisco.
- Livingstone, S. (1992). The Meaning of Domestic Technologies: A Personal Construct Analysis of Familial Gender Relations. In R. Silverstone & E. Hirsch (Eds.), *Consuming Technologies* (pp 63-73). London: Routledge.
- Loges, W.E. & Jung, J. (2001). Exploring the Digital Divide: Internet Connectedness and Age. *Communication Research*, Vol 28, 536-562.
- Lohan, E. M. (1997). Men, Masculinity and the Domestic Telephone. Conference Paper. Ireland in the European and Global 'Information Society' Conference, Dublin. Retrieved from <http://bit.ly/lu6Kdw>
- Lorber, J. (2001). *Gender Inequality: Feminist Theories and Politics*. Los Angeles, CA: Roxbury Publishing Co.
- Ludden, J. (2010). 'E-Grounding' Parents' New Disciplinary Weapon. NPR's Talk of the Nation. Retrieved from <http://n.pr/iIVgHY>
- MacInnis, L. (2009). World economy may lose 51 million jobs: U.N. agency. Reuters. Retrieved from <http://reut.rs/iA5864>
- Mackay, H. & Gillespie, G. (1992). Extending the Social Shaping of Technology Approach: Ideology and Appropriation. *Social Studies of Science*, Vol 22(4), 685-716.
- MacKenzie, D. & Wajcman, J. (1985). *The Social Shaping of Technology: How the Refrigerator Got Its Hum*. Milton Keynes: Open University Press.

- Madden, M. & Rainie, L. (2003). America's Online Pursuits: The Changing Picture Of Who's Online And What They Do. Pew Internet & American Life Project. Retrieved from <http://bit.ly/mQfh7h>
- Madden, M. (2006). Internet penetration and impact. Pew Internet & American Life Report. Retrieved from <http://bit.ly/kyEjNK>
- Madden, M. (2011). Older Adults and Social Media. Pew Internet & American Life Project. Retrieved from <http://bit.ly/mKN1c1>
- Martin, M. (1991). *"Hello Central?" Gender, technology, and culture in the formation of telephone systems*. McGill-Queen's University Press.
- Mattingly, M. & Bianchi, S. (2003). Gender Differences in the Quantity and Quality of Free Time: The U.S. Experience. *Social Forces*, Vol. 81(3), 999-1030.
- Mattingly, M. J. & Sayer, L. C. (2006). Under Pressure: Gender Differences in the Relationship Between Free Time and Feeling Rushed. *Journal of Marriage and Family*, Vol 68(1), 205–221.
- McGerty, L. J. (2000). 'Nobody Lives Only in Cyberspace': Gendered Subjectivities and Domestic Use of the Internet. *CyberPsychology & Behavior*, Vol 3(5), 895-899.
- McLoughlin, C. (2011). Leading Pedagogical Change with Innovative Web Tools and Social Media. *International Journal of Adult Vocational Education and Technology (IJAVET)*, Vol 2(1), 13-22
- Mehra, B., Merkel, C. & Bishop, A. (2004). The internet for empowerment of minority and marginalized users. *New Media and Society*, Vol 6(6), 781-82.
- Menzies, H. (2005). *No time – stress and the crisis of modern life*. Vancouver: Douglas & McIntyre.
- Mesch, G. (2001). Social relationships and Internet use among adolescents in Israel. *Social Science Quarterly*, Vol 82, 329–340.
- Mesch, G. (2003). The Family and the Internet: The Israeli Case. *Social Science Quarterly*, Vol 84(4), 1038-1050.
- Mesch, G. (2006). Family Relations and the Internet: Exploring a Family Boundaries Approach. *The Journal of Family Communication*, Vol 6(2), 119–138.
- Meszaros, P. (2002). The appropriate use of technology: Our commitment to families and communities. *Journal of Family and Consumer Sciences*, 94(2), 13-15.

- Meszaros, P. (2004). The Wired Family: Living Digitally in the Postinformation Age. *American Behavioral Scientist*, Vol 48(4), 377-390.
- Middleton, C. & Leith, J. (2007). Intensity of Internet Use in Canada: Exploring Canadians' Engagement with the Internet. Conference Paper. Statistics Canada Socio-Economic Conference. Retrieved from <http://bit.ly/ijenI2>
- Middleton, C. A., & Ellison, J. (2006). All Broadband Households Are Not the Same: Why Scope and Intensity of Use Matter. Conference Paper. Statistics Canada Socio-economic Conference. Ottawa. Retrieved from <http://bit.ly/m1nbHT>
- Middleton, C. A., & Sorensen, C. (2005). How Connected Are Canadians? Inequities in Canadian Households' Internet Access. *Canadian Journal of Communication*, 30(4), 463-483.
- Mignone, J. & Henleym H. (2009). Impact of Information and Communication Technology on Social Capital in Aboriginal Communities in Canada. *Journal of Information, Information Technology, and Organizations*, Vol 4. Retrieved from <http://bit.ly/jAbonP>
- Milkie, M., Kendig, S., Nomaguchi, K. & Denny, K. (2010). Time with Children, Children's Well-Being, and Work-Family Balance among Employed Parents. *Journal of Marriage and Family*, 72, 1329-1343.
- Milkie, M., Mattingly, M., Nomaguchi, K., Bianchi, S. & Robinson, J. (2004). The Time Squeeze: Parental Statuses and Parents' Feelings about Time with Children. *Journal of Marriage and Family*, Vol 66, 739-61.
- Miller, D. & D. Slater. (2001). *The Internet: An Ethnographic Approach* (First Edition). California: Berg Publishers.
- Mitchell, S. (1979). Interobserver agreement, reliability, and generalizability of data collected in observational studies. *Psychological Bulletin*, Vol 86, 376-390.
- Miyata, K. (2002). Social Supports for Japanese Mother Online and Offline. In B. Wellman & C. Haythornthwaite (Eds.), *The Internet in Everyday Life* (pp 520-548). Oxford: Blackwell Publishers.
- Momodu, M.O. (2002). Information Needs and Information Seeking Behavior of Rural Dwellers in Nigeria: a case study of Ekpoma in Esan West local government area of Edo State, Nigeria. *Library Review*, 51(8), 406-410.
- Morely, D. (1987). *Family Television*. London: Routledge.
- Morley, D. (1992). *Television, Audiences and Cultural Studies*. London: Routledge

- Morley, D. (2006). What's 'home' got to do with it? Contradictory dynamics in the domestication of technology and the dislocation of domesticity. In T. Berker, M. Hartmann, Y. Punie, and K. Ward (Eds.), *Domestication of Media and Technologies* (pp 22-39). Maidenhead: Open University Press.
- Morley, D. & Silverstone, R. (1990). Domestic Communication Technologies and Meanings. *Media, Culture and Society*, Vol 12, 31-56.
- Morris, K. (2009). Crisis Communications: Challenges faced by Remote and Rural Communities in North Eastern Ontario. *The McMaster Journal of Communication*, Vol 6(1), Article 6. Retrieved from <http://bit.ly/mdBtpm>
- Morrison, D., Brown, R., Hemmings, T. & Svennevig, M. (2000). Finding A Home For New Technology: A Virtual Ethnography Of The Social Changes In Relation To The New Technology. Retrieved from <http://bit.ly/iZtg9J>
- Moss, M. & Mitra, S. (1998). Net Equity: A Report on Income and Internet Access. *Journal of Urban Technology*, Vol 5(3), 23-32.
- Mossberger, K., Tolbert, C. & McNeal, R. (2008). *Digital citizenship: the internet, society, and participation*. Massachusetts: MIT Press.
- Moyal, A. (1992). Women Calling! The Gendered Use Of The Telephone: An Australian Case Study. *Media, Culture & Society*, Vol 14(1), 51-72.
- Murdock, G, Hartmann, P. & Gray, P. (1995). Contextualizing Home Computing: Resources and Practices. In N. Heap, R. Thomas, G. Eison, R. Mason & H. Mackay (Eds.), *Information Technology and Society* (pp 269-283). London: Sage.
- Myrie, J. & Daly, K. (2009). The Use of Boundaries by Self-employed, Home-Based Workers to Manage Work and Family: A Qualitative Study in Canada. *Journal of Family and Economic Issues*, Vol 30 (4), 386-398.
- Nakamura, L. (2004). Interrogating the digital divide: The political economy of race and commerce in new media. In P. Howard and S. Jones (Eds.), *Society online: The internet in context* (pp.71-84). Thousand Oaks, CA: Sage Publications.
- Nakano Glenn, E., Chang, G. & Rennie Forcey, L. (1994). *Mothering: ideology, experience, and agency*. New York: Routledge
- Nansen, B., Arnold, M., Gibbs, M. & H. Davis. (2010). Time, space and technology in the working-home: an unsettled nexus. *New Technology, Work, and Employment*, Vol 25 (2), 136-153.

- Nardi, B., Whittaker, S., & Bradner, E. (2000). Interaction and outeraction: Instant messaging in action. In CSCW '00: Proceedings of the 2000 ACM Conference on Computer Supported Cooperative Work (pp. 79–88). Philadelphia, PA: ACM Press.
- NeilsonWire. (2010). African-Americans, Women and Southerners Talk and Text The Most in the U.S. Retrieved from <http://bit.ly/igoCma>
- Nelson, M. (2010). *Parenting out of Control: Anxious Parents in Uncertain Times*. New York: New York University Press.
- Neuendorf, K. A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage.
- Nicholson, W., Grason H. & Powe, N. (2003). The relationship of race to women's use of health information resources. *American Journal of Obstetrics and Gynecology*, Vol 188, 580-585.
- Nie, N. & Hillygus, D.S. (2002). The Impact Of Internet Use On Sociability: Time-Diary Findings. *It & Society*, Vol 1(1), 1-20.
- Nie, N. H., Simpser, A., Stepanikova, I. & Zheng, L. (2004). Ten years after the birth of the Internet, how do Americans use the Internet in their daily lives? Stanford, CA: Stanford Center for the Quantitative Study of Society. Retrieved from <http://bit.ly/iKdRQN>
- Nie, N., Hillygus, D.S. & Erbring, L. (2002). Internet Use, Interpersonal Relations, and Sociability: A Time Diary Study. In B. Wellman & C. Haythornthwaite (Eds.), *The Internet in Everyday Life* (pp 215-243). Oxford: Blackwell Publishers.
- Nippert-Eng, C. (1996). *Home and work: Negotiating the boundaries of everyday life*. Chicago: University of Chicago Press.
- O'Donnell, S., Milliken, M., Chong, C & Walmark, B. (2010). Information and Communication Technologies (ICT) and Remote and Rural First Nations Communities : An Overview. Conference Paper: 2010 Canadian Communication Association Annual Conference, Montreal, Quebec. Retrieved from <http://bit.ly/IKbDM0>
- O'Donnell, S., Perley, S., Walmark, B., Burton, K., Beaton, B. & Sark, A. (2007). Community-based broadband organizations and video communications for remote and rural First Nations in Canada. Proceedings of the Community Informatics Research Network (CIRN) 2007 Conference, Prato, Italy, November. Retrieved from <http://bit.ly/IO3c6A>

- Oksman, V. & Rautiainen, P. (2003). "Perhaps it's a body part?" How the mobile phone became an organic part of the everyday lives of Finnish children and teenagers. In James E. Katz (Ed.), *Machines that become us: The social context of personal communication technology* (pp. 293–308). New Brunswick: Transaction Publishers.
- Oksman, V. (2006). Mobile visibility and everyday life in Finland: An ethnographic approach to social uses of mobile image. In Joachim R. Höfllich & Maren Hartmann (Eds.), *Mobile communication in everyday life: Ethnographic views, observations and reflections* (pp. 103–119). Berlin: Frank & Timme.
- Oravec, J. A. (2000). Internet and computer technology hazards: Perspectives for family counseling. *British Journal of Guidance & Counseling*, 28, 309-335.
- Orenstein, P. (2009. June 25). The way we live now - The Overextended Family. *New York Times*. Retrieved from <http://nyti.ms/iTSVzS>
- Orleans, M & M. Laney. (2000). Children's computer use in the home: isolation or sociation? *Social Science Computer Review*, Vol 18(1), 56-72.
- Ortutay, B. (2009. June 16). Family time drops as Internet popularity soars, survey. *Associated Press*. Retrieved from <http://bit.ly/j7G712>
- Palfrey, J. & Gasser, U. (2008). *Born Digital: Understanding the First Generation of Digital Natives*. New York: Basic Books.
- Panagakos, A. & Horst, H. (2006). Return to Cyberia: technology and the social worlds of transnational migrants. *Global Networks*, Vol 6(2), 109-124.
- Pascoe, C.J. (2011). Resource and Risk: Youth Sexuality and New Media Use. *Sexuality Research and Social Policy*, Vol 8 (1), 5-17.
- Pastore, M. (2002. January 29). Internet Part of the Family in Canada. *ClickZ News*. Retrieved from <http://bit.ly/mMLtWo>
- Pearson, M. (2006. June 6). "Family vacation plans take high-tech journey". *Atlanta Journal-Constitution*.
- Pinch, T. J. & Bijker, W. E. (1984). The Social Construction of Facts and Artefacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other. *Social Studies of Science*, Vol 14 (Aug), 399-441.
- Putnam, R. (2000). *Bowling alone*. New York: Simon, Schuster.

- Pyati, A., Chu, C., Fisher, K., Srinivasan, R., Caidi, N., Allard, D. & Dechief, D. (2008). ICT-mediated diaspora studies: New directions in immigrant information behavior research. *Proceedings of the American Society for Information Science and Technology*, 45: 1–5.
- Rainie, L. (2000). Tracking Online Life: How women use the Internet to Cultivate Relationships. Pew Internet and American Life Project. Retrieved from <http://bit.ly/iWgu2S>
- Rainie, L. & Keeter, S. (2006). Americans and their cell phones. PEW Internet & American Life Project. Retrieved from <http://bit.ly/IMO9D3>
- Rainie, L. & Wellman, B. (forthcoming 2012). *Networked*. Massachusetts: MIT Press.
- Rakow, L. (1988). Women and the Telephone: The Gendering of a Communications Technology. In C. Kramara (Ed.), *Technology and Women's Voices: Keeping In Touch* (pp 207-228). New York: Routledge.
- Rakow, L. (1992). *Gender on the Line: Women, the Telephone, and Community Life*. Champaign, IL: University of Illinois Press
- Ramirez, R., Aitkin, H., Jamieson, R. & Richardson, D. (2003). Harnessing ICTS: A Canadian First Nations Experience – Introduction to K-Net. Institute for Connectivity in the Americas, Ottawa: IDRC. Retrieved from <http://bit.ly/j4094X>
- Ramirez, R. (2000). Rural and Remote Communities Harnessing Information and Communication technology for Community Development. Guelph, ON: University of Guelph, Rural Extension Studies. Retrieved from <http://bit.ly/mAK3eF>
- Rauner, F., Rasmussen, L. & Corbett, M. (1988). The Social Shaping of Technology and Work: Human-Centred CIM Systems. *AI and Society*, Vol 2, 47-61.
- Rees, H. & Noyes, J. M. (2007). Mobile Telephones, Computers and the Internet: Sex Differences in Adolescents' Use and Attitudes. *Cyberpsychology & Behavior*, Vol 10(3), 482–484.
- Rehm, M., Allison, B. & Johnson, L. (2003). The Internet and Critical Issues for Families. *Journal of Family and Consumer Sciences Education*, Vol 21(2), 33-43.
- Reinharz, S. (1992) *Feminist Methods in Social Research*. New York: Oxford Press.
- Renneker, J. & Godwin, L. (2003). Theorizing the unintended consequences of instant messaging (IM) for worker productivity. *Sprouts: Working Papers on Information Environments, Systems and Organizations*, Vol 3(3), 137–168.

- Reuters News. (2010. January 25). Time constraints boost popularity of online dating. Retrieved from <http://bit.ly/kwpC1D>
- Rheingold, H. (2002). *Smart Mobs: The Next Social Revolution*. Cambridge, MA: Perseus Publishing.
- Riback, R. (2001). Like immigrants: Negotiating power in the face of home computing. *Media, Culture & Society*, Vol 3(2), 220-238.
- Richardson, H. (2008). A 'smart house' is not a home: The domestication of ICTs. *Information Systems Frontiers*, Vol 11(5), 599-608.
- Rieh, S. (2004). On the Web at Home: Information Seeking and Web Searching in the Home Environment. *Journal of the American Society for Information Science and Technology*, 55(8):743–753.
- Robbin, A. & Buente, W. (2008). Internet information and communication behavior during a political moment: The Iraq war, March 2003. *Journal of the American Society for Information Science and Technology*, Vol 59, 2210–2231.
- Roberts, L. (2010. 9 March). Men have more leisure time than women, says new report. *The Telegraph*. Retrieved from <http://bit.ly/j3oerQ>
- Robertson, A., Soopramaniana, D. & Fildesa, R. (2007). A segment-based analysis of Internet service adoption among UK households. *Technology in Society*, Vol 29(3), 339-350.
- Robinson, J.P. & Godbey, G. (1997). *Time for Life: The Surprising Ways Americans Use Their Time*. Pennsylvania: Pennsylvania State University Press.
- Rode, J. (2009). Digital parenting: designing children's safety. In Proceedings of the 23rd British HCI Group Annual Conference on People and Computers: Celebrating People and Technology (BCS-HCI '09). British Computer Society, Swinton, UK, UK, 244-251.
- Rodriguez, M., Gonzalez, V., Favela, J. & Santana, P. (2009). Home-based communication system for older adults and their remote family. *Computers in Human Behavior*, Vol 25 (3), 609-618.
- Rogers, E. (1985). The Diffusion of Home Computers among Households in Silicon Valley. *Marriage and Family Review*, Vol 8, 82–96.
- Rommes, E. (2002). *Gender Scripts and the Internet*. Enshede, Netherlands: Twente University Press.

- Ros, A. (2008). Interconnected immigrants in the Information Society. In A. Alonso & P. Oiarzabal (Eds.), *Digital Diasporas*. University of Arizona Press. Retrieved from <http://bit.ly/j3k1OC>
- Roser, J. & Peil, C. (2010). Diffusion and Participation through Domestication. Internet Access and Use in Germany during the years 1997-2007. *Medien & Kommunikationswissenschaft*, No 4.
- Ryan, G. & Bernard, H. (2003). Data Management and Analysis Methods. In Denzin & Lincoln (Eds.), *Collecting and Interpreting Qualitative Methods* (pp 259-309). Thousand Oaks: Sage.
- Salaff, J. & Greve, A. (2003). Gendered Structural Barriers to Job Attainment for Skilled Chinese Emigrants in Canada. *International Journal of Population Geography*, Vol 9, 443-456.
- Salaff, J. (2002). Where Home is the Office: The New Form of Flexible Work. In B. Wellman & C. Haythornthwaite (Eds.), *The Internet in Everyday Life* (pp 464-495). Oxford: Blackwell Publishers.
- Salaff, J., Greve, A. & Xu, L. (2002). Paths into the Economy: Structural Barriers and the Job Hunt for Skilled PRC Migrants in Canada. *International Journal of Human Resource Management*, Vol. 13(3), 450-64.
- Sanders, C. E., Field, T., Diego, M. & Kaplan, M. (2000). The relationship of Internet use to depression and social isolation among adolescents. *Adolescence*, Vol 35, 237-242.
- Sarantakos, S. (2005). *Social Research* (3rd Ed). New York, NY: Palgrave MacMillan.
- Savolainen, R. (1995). Everyday life information seeking: Approaching information seeking in the context of "way of life." *Library and Information Science Research*, Vol 17, 259-294.
- Sawada, M., Cossette, D., Wellar, B. & Kurt, T. (2006). Analysis of the urban/rural broadband divide in Canada: Using GIS in planning terrestrial wireless deployment. *Government Information Quarterly*, Vol 23(3-4), 454-479.
- Schieman, S. & Glavin, P. (2008). Trouble at the border? Gender, flexibility at work, and the work-home interface. *Social Problems*, Vol 55(4), 590-611.
- Schieman, S., Milkie, M. & Glavin, P. (2009). When Work Interferes with Life: The Social Distribution of Work-Nonwork Interference and the Influence of Work-Related Demands and Resources. *American Sociological Review*, Vol 74, 966-988.

- Schulze, S. (2007). The usefulness of reflexive photography for qualitative research: a case study in higher education. *South African Journal of Higher Education*, Vol 21 (5). Retrieved from <http://bit.ly/kEcMvV>
- Schwartz, J. (2004. January 3). That Parent-Child Conversation Is Becoming Instant, and Online. *New York Times*. Retrieved from <http://nyti.ms/kTRkLC>
- Sciadas, G. (2002). The Digital Divide in Canada. *Canadian Economic Observer*, Vol 3(1-3). Retrieved form <http://bit.ly/iObIKj>
- Selouani, S. A. & Hamam, H. (2007). Social impact of broadband Internet: A case study in the Shippagan area, a rural zone in Atlantic Canada. *Journal of Information, Information Technology, and Organizations*, Vol 2, 79-94. Retrieved from <http://bit.ly/mB38bw>
- Selwyn, N. (2003). Apart from technology: understanding people's non-use of information and communication technologies in everyday life. *Technology in Society*, Vol 25. 99-116.
- Senyurekli, A. & Detzner, D. (2009). Communication Dynamics of the Transnational Family. *Marriage & Family Review*, Vol 45 (6), 807-824.
- Shade, L. R. (2002). *Gender & Community in the Social Construction of the Internet*. New York: Peter Lang.
- Shade, L. (2004). Bending Gender Into the Net, Feminizing Content, Corporate Interests, and Research Strategy. In P.N. Howard & S. Jones (Eds.), *Society Online: The Internet in Context* (pp 57-83). Sage: Thousand Oaks.
- Shade, L. R. & We, G. (1993). The Gender of Cyberspace. *Internet Business Journal*, Vol 1(2), 12-13.
- Sharp, V. (1979). *Statistics for the Social Sciences*. Boston: Little Brown & Co.
- Shin, W. & Huh, J. (2011). Parental mediation of teenagers' video game playing: Antecedents and consequences. *New Media & Society*. Retrieved from <http://bit.ly/ku1zrG>
- Shiu, E. & Lenhart, A. (2004). How Americans Use Instant Messaging. Pew Internet & American Life Project. Retrieved from <http://bit.ly/mf7yYJ>
- Shklovski, I., Kiesler, S. & Kraut, R. (2006). The Internet and Social Interaction: A Meta-analysis and Critique of Studies, 1995-2003. In R. Kraut, M. Brynin & S. Kiesler (Eds.), *Domesticating Information Technology* (pp 251-264). Oxford: University Press.

- Silverstone, R. & Haddon, L. (1996). Design and the domestication of information and communication technologies: technical change and everyday life. In R. Mansell & R. Silverstone (Eds.), *Communication by Design: The Politics of Information and Communication Technologies* (pp 44-74). Oxford University Press: New York.
- Silverstone, R. & Hirsch, E. (1992). *Consuming technologies: Media and information in domestic spaces*. New York: Routledge
- Silverstone, R. (1993). Time, Information and Communication Technologies in the Household. *Time and Society*, Vol 2(3), 283-311.
- Silverstone, R. (2006). Domesticating Domestication. Reflections on the Life of a Concept. In T. Berker, M. Hartmann, Y. Punie & K. Ward (Eds.), *Domestication of Media and Technologies* (pp. 229-48). Maidenhead: Open University Press.
- Singh, S. (2001). Gender and the use of the Internet in the home. *Media, Culture & Society*, Vol 3(4), pp 395-416.
- Singh, V. (2004). Factors Associated with Household Internet Use in Canada, 1998-2000. Statistics Canada Agriculture Division, Agriculture and Rural Working Paper Series: Working Paper No. 66. Retrieved from <http://bit.ly/koXaZ0>
- Smith, A. (2008a). The internet's role in campaign 2008. Pew Internet and American Life Project. Retrieved from <http://bit.ly/maUhcj>
- Smith, A. (2008b). Family webs: The impact of women's genealogy research on family communication. Doctoral Dissertation, Bowling Green State University, Communication Studies.
- Smith, A. (2010a). Technology Trends Among People of Color. Pew Internet & American Life Project. Retrieved from <http://bit.ly/jRLvHY>
- Smith, A. (2010b). Mobile Access 2010. Pew Internet & American Life Projects. Retrieved from <http://bit.ly/lZiX6t>
- Smith, D. (1987). *The Everyday World as Problematic: A Feminist Sociology*. Boston: Northeastern University Press.
- Smith, D. (1990). *The Conceptual Practices of Power: A Feminist Sociology of Knowledge*. University of Toronto Press: Toronto.
- Smith, J.O. (2011). Parental perceptions of home Internet use among rural African American families. Doctoral Dissertation, Gambling State University. Retrieved from <http://bit.ly/m2TKXA>

- Sparks-Jackson, B. & Silverman, E. (2010). Understanding Descriptive Statistics. In S. Braude & B.Low (Eds.), *An Introduction to Methods & Models in Ecology, Evolution & Conservation Biology* (pp 155-178). New Jersey: Princeton University Press.
- Spink, A. & Cole, C. (2001). Information and poverty: Information-seeking channels used by African American low-income households. *Library & information Science Research*, Vol 23, 45-65.
- Spooner, T. & Rainie, L. (2000). African-Americans and the Internet. Pew Internet & American Life Project. Retrieved from <http://bit.ly/mdG8GR>
- Stalker, G. (2005). Change in the social and environmental context of Canadian leisure time, 1986-1998. Conference Paper. International Association for Time Use Research (IATUR). Halifax, Nova Scotia.
- Statistics Canada. (2002). 2001 Census: Marital Status, common-law status, families, dwellings and households. Retrieved from <http://bit.ly/m3FICO>
- Statistics Canada. (2003). Births. Retrieved from <http://bit.ly/mszHoB>
- Statistics Canada. (2006a). Canadians in Context – Households and Families. Retrieved from <http://bit.ly/m19ZrE>
- Statistics Canada. (2006b). Canadian Internet Use Survey. Retrieved from <http://bit.ly/mRUIo6>
- Statistics Canada. (2006c). National occupational classification for statistics (NOC-S). Retrieved from: <http://bit.ly/k0YgKK>
- Statistics Canada. (2006d). Family portrait: Continuity and change in Canadian families and households in 2006. Retrieved from <http://bit.ly/pHSv5T>.
- Statistics Canada. (2007a). Working at home: An update. *Perspectives on Labour and Income*. 8(6). Retrieved from <http://bit.ly/iNgoNU>
- Statistics Canada. (2007b). Study: Canada's immigrant labour market. Retrieved from <http://bit.ly/jUksyO>
- Statistics Canada. (2009). Canadian Internet Use Survey. Retrieved from <http://bit.ly/jpR0Db>
- Steinfeld, C., Dutton, W. & Kovaric, P. (1989). A Framework and Agenda for Research on Computing in the Home. In J. Salvaggio & J. Bryant (Eds.), *Media Use in the Information Age: Emerging patterns of Adoption and Computer Use*. Hillsdale, NJ: Lawrence Erlbaum Associates.

- Stevens, J. (2002). *Applied multivariate statistics for the social sciences*. New Jersey: Lawrence Erlbaum Associates.
- Stewart, J. (2003). The social consumption of information and communication technologies (ICT): insights from research on the appropriation and consumption of new ICT in the domestic environment. *Cognitive Tech Work*, Vol 5, 4-14.
- Stewart, J. (2007). Local Experts in the Domestication of Information and Communication Technologies. *Information, Communication & Society*, Vol 10(4), 547-569.
- Stoloz, N.C., Chuang-Fong Shih, E. & Vekatesh, A. (2000). The Home of the Future: An Ethnographic Study of New Information Technologies in the Home. Working Paper Project Noah: CRITO, California: University of California, Irvine.
- Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge, England: Cambridge University Press.
- Stump, R., Gong, W. & Li, Z. (2008). Exploring the Digital Divide in Mobile-phone Adoption Levels across Countries: Do Population Socioeconomic Traits Operate in the Same Manner as Their Individual-level Demographic Counterparts? *Journal of Macromarketing*, Vol 28(4), 397-412.
- Subrahmanyam, K. & Šmahel, D. (2011). The Darker Sides of the Internet: Violence, Cyber Bullying, and Victimization. *Digital Youth: Advancing Responsible Adolescent Development*, 179-199.
- Sullivan, C. & Lewis, S. (2001). Home based telework, gender, and the synchronization of work and family: Perspectives of teleworkers and their co-residents. *Gender, Work and Organization*, Vol 8(2), 123-145.
- Sullivan, C. & Smithson, J. (2007). Perspectives of homeworkers and their partners on working flexibility and gender equity. *International Journal of Human Resource Management*. Vol 18 (3), 448-461
- Tapscott, D. (1997). *Growing up digital: The rise of the Net generation*. New York: McGraw-Hill.
- Thayer, S. & Ray, S. (2006). Online Communication Preferences across Age, Gender, and Duration of Internet Use. *CyberPsychology & Behavior*, 9(4), 432-440.
- Thompson-James, M. (1999). Computer Use and Internet Use by Members of Rural Households. Statistics Canada Agricultural Division, Working Paper #40. Retrieved from <http://bit.ly/jHqjOR>
- Tönnies, F. (1957). *Community and Society*. East Lansing: Michigan State University Press.

- Tripp, L. (2011). 'The computer is not for you to be looking around, it is for schoolwork': Challenges for digital inclusion as Latino immigrant families negotiate children's access to the internet. *New Media & Society*. Retrieved from <http://bit.ly/iDvN7T>
- Turcotte, M. (2007). Time spent with family during a typical work day 1986 to 2006. Canadian Social Trends, Statistics Canada – Catalogue No. 11-08. Retrieved from <http://bit.ly/jlNKXa>
- Turow, J. (1999). The Internet and the family: The view from the family, the view from the press. The Annenberg Public Policy Center of the University of Pennsylvania. Retrieved from <http://bit.ly/kgEp0n>
- Turow, J. (2001). Family boundaries, commercialism, and the Internet: a framework for research. *Journal of Applied Developmental Psychology*, Vol 22(1), 73-86.
- Turow, J. & Kavanaugh, A. (2003). *The Wired Homestead*. Cambridge, MA: MIT Press.
- US Census Bureau. (2001). Home Computers and Internet Use in the US – August 2000. Retrieved from <http://1.usa.gov/loskgo>
- U.S. Census Bureau. (2006). U.S. Department of Commerce. Retrieved from <http://1.usa.gov/jJjOw3>
- Van Dijk, J. (2006). *The Network Society*. London: Sage.
- VanEvery, J. (1997). Understanding Gendered Inequality: Reconceptualizing Housework. *Women's Studies International Forum*, Vol 20(3), 411-420.
- Van Zoonen, L. (2002). Gendering the Internet. *European Journal of Communication*, Vol 17(1), 5-23.
- Veblen, T. (2007). *Theory of the Leisure Class: A Theory of Institutions*. New York: Cosimo Inc.
- Veenhof, B., Wellman, B., Quell, C. & B. Hogan. (2008). How Canadians' Use of the Internet Affects Social Life and Civic Participation. Statistics Canada Connectedness Series, Science, Innovation and Electronic Information Division. Retrieved from <http://bit.ly/kw1Tz2>
- Venkatesh, A. (1996). Computers and Other Interactive Technologies for the Home. *Communications of the ACM*, Vol 39(12), 47-54.

- Venkatesh, A., Shih, E. & Stolzoff, N. (2000). A Longitudinal Study of Computing in the Home. In A. Sloane & F. van Rijn (Eds.), *Home Informatics and Telematics: Information, Technology and Society* (pp 205-216). Norwell, MA: Kluwer Academic Publishers.
- Venkatesh, A., Kruse, E., & Shih, E. C. F. (2003). The networked home: an analysis of current developments and future trends. *Cognition, Technology & Work*, Vol 17 (1), 5-23.
- Viseu, A., Clement, A., Aspinall, J & Kennedy, T. (2006). The Interplay of Public and Private Spaces in Internet Access. *Information, Communication & Society*, Vol 9(5), 633-656.
- Vuojarvi, H., Isomaki, H., & Hynes, D. (2010). Domestication of a laptop on a wireless campus: a case study. *Australasian Journal of Educational Technologies*, Vol 26(2), 250-267.
- Wajcman, J. (2008). Life in the fast lane? Towards a sociology of technology and time. *The British Journal of Sociology*, Vol 59(1), 59-70.
- Walker, K. (1994). "I'm no friends the way she's friends": Ideological and behavioral constructions of masculinity in men's friendships. *Masculinities*. Vol 2, 38-55
- Wang, Y., Sun, S. & Haridakis, P. (2009). Internet Use and Cross-Cultural Adaptation: Testing a Model of Internet Use in the Cross-Cultural Adaptation Context. *Journal of Intercultural Communication*, Issue 20. Retrieved from <http://bit.ly/mAkZfD>
- Ward, K. (2002). Domesticity, Public Communication and the WWW. Retrieved from <http://bit.ly/liNRJJ>
- Ward, K. (2005). Internet Consumption in Ireland – Towards a 'Connected' Domestic Life. In R. Silverstone (Ed.), *Media, Technology, and Everyday Life in Europe: From Information to Communication* (pp 107-123). Aldershot: Ashgate.
- Warren, J., Hecht, M., Jung, E., Kvasny, L. & Henderson, M. (2010). African American Ethnic and Class-Based Identities on the World Wide Web: Moderating the Effects of Self-Perceived Information Seeking/Finding and Web Self-Efficacy. *Communication Research*, Vol 37(5), 674-702.
- Watt, D. & White, J. M. (2000). Computers and the family: A family developmental perspective. *Journal of Comparative Family Studies*, Vol 26, 1-15.
- Wei, R. & Lo, V. (2006). Staying connected while on the move: Cell phone use and social connectedness. *New Media & Society*, Vol 8(1), 52–73.
- Weber, M. (1958). *The Protestant Ethic and the Spirit of Capitalism*. New York: Scriber.

- Webster, F. (2002). *Theories of the Information Society*. London: Routledge.
- Wellman, B. (1985). Domestic Work, Paid Work and Net Work. In S. Duck & D. Perlman (Eds.), *Understanding Personal Relationships* (pp 159-191). London: Sage.
- Wellman, B. (2002). Physical Place and Cyberplace: The Rise of Personalized Networking. *International Journal of Urban and Regional Research*, Vol 25 (2), 227-252.
- Wellman, B. (2004). The three ages of internet studies: ten, five and zero years ago. *New Media & Society*, Vol 6(1), 123–129.
- Wellman, B. (2011). Studying the Internet Through the Ages. In M. Consalvo & C. Ess (Eds.), *The Blackwell Handbook of Internet Studies* (pp 17-23). Oxford: Wiley-Blackwell.
- Wellman, B. & Gulia, M. (1999). Net Surfers Don't Ride Alone: Virtual Community as Community. In B. Wellman (Ed), *Networks in the Global Village* (pp. 331-67). Boulder, CO: Westview Press.
- Wellman, B. & Hogan, B. with Kristen Berg, Jeffrey Boase, Juan-Antonio Carrasco, Rochelle Côté, Jennifer Kayahara, Tracy L.M. Kennedy & Phouc Tran (2006). Connected Lives: The Project. In Patrick Purcell (Eds.), *Networked Neighbourhoods* (pp. 157-211). Guildford, UK: Springer.
- Wellman, B. & Haythornthwaite, C. (2002). *The Internet in Everyday Life*. Oxford: Blackwell.
- Wellman, B., Quan-Haase, A., Boase, J., Chen, W., Hampton, K., Isla de Diaz, I. & Miyata, K. (2003). The Social Affordances of the Internet for Networked Individualism. *Journal of Computer Mediated Communication*, Vol 8(3). Retrieved from <http://bit.ly/1WF5HE>
- Welsh, S. (1999). Gender and Sexual Harassment. *Annual Review of Sociology*, Vol 20(1), 87-107.
- West, C. & Zimmerman, D. (1987). Doing Gender. *Gender and Society*, Vol 1(2),125-52.
- Wheelock, J. (1992). Personal computers, gender and an institutional model of the household. In R. Silverstone & E. Hirsch (Eds.), *Consuming Technologies* (pp 97-112). London: Routledge.
- Williams, R. & Edge, D. (1996). *The Social Shaping of Technology*. *Research Policy*, Vol 25, 856-899
- Winner, L. (1977). *Autonomous Technology*. Cambridge: MIT Press.

- Yammarino, F., Skinner, S. & Childers, T. (1991). Understanding Mail Survey Response Behavior - A Meta Analysis. *Public Opinion Quarterly*, Vol 55 (4), 613-639.
- Yang, G. (2003). The Internet and the Rise of a Transnational Chinese Cultural Sphere. *Media Culture & Society*, Vol 25, 469-490.
- Yardi, S. & Bruckman, A. (2011). Social and Technical Challenges in Parenting Teens' Social Media Use. Conference Paper. CHI 2011, May 7–12, 2011, Vancouver, BC, Canada.
- Ybarra, M. & Mitchell, K. (2008). How Risky Are Social Networking Sites? A Comparison of Places Online Where Youth Sexual Solicitation and Harassment Occurs. *Paediatrics*, Vol 121(2), 350-357.
- Yin, R. K. (1991). *Case study research: Design and methods*. Newbury Park: Sage Publications.
- Zamaria, C., Caron, A. & Fletcher, F. (2005). Canada Online! A Comparative Analysis of internet users and non-users in Canada and the world: Behaviour, attitudes and trends 2004. Canadian Internet Project Report. Retrieved from <http://bit.ly/IMWNyA>
- Zhou, T. (2011). The impact of privacy concern on user adoption of location-based services. *Industrial Management & Data Systems*, Vol 111(2), 212-226.
- Zibran, M. (No Date). CHI-Squared Test of Independence. Department of Computer Science, University of Calgary. Retrieved from <http://bit.ly/IHHGbQ>
- Zickuhr, K. (2011). Generations and their gadgets. Pew Internet & American Life Project. Retrieved from <http://bit.ly/m3PRdT>
- Zillien, N. & Hargittai, E. (2009). Digital Distinction: Status-Specific Types of Internet Usage. *Social Science Quarterly*, Vol 90, 274–91.

Appendices
Appendix A: Introductory Information Letter

(On Urban Centre Letterhead)

June 1st, 2004

Dear _____,

My name is Professor Barry Wellman, director of NetLab located at the Centre of Urban and Community Studies, University of Toronto. I am writing to invite you to participate in our Connected Lives Project about Communication and Technology.

Our NetLab research team is made up of myself and students from the Centre for Urban & Community Studies at the University of Toronto. The goal of our research is to learn about how Canadians communicate with their friends and family. We hope to better understand how different types of communication are used in all parts of your everyday life. This is a major community study funded by the Social Science and Humanities Research Council of Canada, our country's major social scientific research agency.

In about two weeks, our research team will drop off a questionnaire at your home. If you choose to participate in our study, it will take about one (1) hour to fill it out, and we will pick up the questionnaire around June 30th.

We would like to offer your household a \$5 gift certificate for Tim Horton's in thanks for participating in our study. We realize that your time is valuable, so we would like to show our gratitude to you with this offer. We will also send you a copy of an article about your community, and we will help community agencies to understand what's happening in your area. We believe that you will find the experience to be an interesting one, and you will also help us to understand the changing world we live in. The results of our research will be published in academic journals and magazines. We'll be happy to send you an article about it.

Your participation in our study is completely voluntary. All information that you provide will be kept strictly confidential and anonymous, and will be used for university research purposes only. Because of the scientific way in which your name was selected, your cooperation is important: we cannot replace you with another participant. I can assure you that your name, address and other personal information will never be revealed.

We will soon be stopping by your home to drop off the questionnaire. If you have any questions, please contact us at 416-978-0250, send me an email at eastyork@chass.utoronto.ca, or visit our website at www.chass.utoronto.ca/~eastyork.

Thank you in advance for your cooperation.

Sincerely,
Professor Barry Wellman
Director – NetLab
University of Toronto

Appendix B: Survey Information Letter & Consent Form

(On Urban Centre Letterhead)
June 14th, 2004

Dear _____,

My name is Professor Barry Wellman, director of NetLab located at the Centre of Urban and Community Studies, University of Toronto. I contacted you two weeks ago about participating in our Connected Lives Project, and we hope that you have chosen to fill out our questionnaire. I would like to explain our project briefly again, and how you can be part of it.

The purpose of our project: The Connected Lives Project is funded by the Social Science and Humanities Research Council of Canada. The goal of our project is to learn about how Canadians communicate with their friends and family. We hope to understand how different types of communication are used in your everyday life. If you choose to participate in our study, it will take about one (1) hour to fill out the questionnaire, and we will pick up the survey around June 30th.

We are also interested in doing an interview to follow-up on some of the questions you have answered. The interview will take approximately 1.5 to 2 hours with yourself and a member of the NetLab research team. To show our gratitude to you we would like to offer you a \$20 Loblaw's gift certificate for participating in the interview. If you are interested in participating, or have some questions about the interview, please tick off the appropriate box at the bottom of this letter.

What risks are there for you in participating in this study? There are no risks to participating in this study. Your participation is completely voluntary, and greatly appreciated. You may withdraw from the survey at any time by simply indicating your intention to withdrawal. You may refuse to answer any questions that you don't feel comfortable answering.

What are the benefits for you in participating in this study? We would like to offer your household a \$5 gift certificate for Time Horton's in thanks for participating in our study. We realize that your time is valuable, so we would like to show our gratitude to you with this offer. We will also send you a copy of an article about your community, and we will help community agencies to understand what's happening in your area.

Confidentiality: All data will remain confidential. All information that you provide to us will be kept strictly confidential and anonymous, and will be used for university research purposes only. Your name, address and other personal information will never be revealed, as we will assign you a pseudonym when we examine the results. The results of this study are used for academic purposes only such as conferences, PhD dissertations, journal publications and magazines.

Thank you for participating in our study. Please do not hesitate to contact me if you have any questions or concerns at 416-978-0250, send me an email at eastyork@chass.utoronto.ca or visit our website at www.chass.utoronto.ca/~eastyork.

Sincerely,

Professor Barry Wellman
Director – NetLab
University of Toronto

SURVEY - INFORMED CONSENT

(On Urban Centre Letterhead)

I have read and understood the conditions under which I will participate in this study and received a \$5 gift certificate for Tim Horton's. My questions have been answered to my satisfaction. I voluntarily consent to participate in the study. I have received a copy of the consent letter.

Name (please print): _____

Signature: _____

Date: _____

Interview:

I am interested in participating in an interview to provide further information, which will be approximately 1.5 – 2 hours long.

- Yes, I am interested in an interview.
 - Telephone Number: _____
 - Email Address: _____

- No, I am not interested in an interview.
- Unsure, I would like some more information about the interview.

Contact Information:

Barry Wellman
Professor of Sociology
NetLab Director
Centre for Urban & Community Studies
University of Toronto
455 Spadina Avenue
Toronto, ON, Canada M5S 2G8
Tel. +1 416-978-0250
Fax: +1 416-978-7162
Email: eastyork@chass.utoronto.ca

Appendix C: Interview Information Letter & Consent Form

(On Urban Centre Letterhead)

July 1st, 2004.

Dear _____,

Thank you for agreeing to further participate in our Connected Lives Project.

The interview will follow-up on some of the questions you have answered in the survey, and will ask some new ones about the same topics. The interview will be much like a casual conversation with open-ended questions. It will take approximately 1.5 to 2 hours to complete with yourself and a member of the NetLab research team in your home. With your consent, the interview will be tape-recorded so that we may transcribe it at a later date for academic analysis. If you wish to review your interview transcript, you may do so by contacting me at my office. If you do not feel comfortable having the interview in your home, we can make arrangements to conduct it somewhere else.

Your participation in this interview is completely voluntary. You may withdraw from the interview at any time by simply indicating your intention to withdrawal. You may stop the interview at anytime. You may also refuse to answer any questions that you don't feel comfortable answering.

To show our gratitude to you we would like to offer you \$20.

We would like your permission to take a digital picture of where your household technology (such as your computer and internet) is located. Pictures will not include any household members, or any distinguishing features that may identify who you are. We are able to show you the pictures on the digital camera before we leave if you wish.

You will remain anonymous, and your responses answers confidential. Each participant will be assigned a pseudonym before tapes are transcribed and results are analyzed. Audiocassettes will be destroyed within three years after the interviews. During this period, transcripts will be password protected on a computer and only Professor Barry Wellman and the NetLab research team will have access to the data. The interview tapes will be locked in a file cabinet at the Centre for Urban and Community Studies. The data will be only used for scientific purposes. Your name, address or personal information will not be used in the study. Before any presentation of the data, such as publication, reports, or theses, all results will be double checked to make sure there are no names, initials or other identifying information.

Thank you again for participating in our study. Please do not hesitate to contact me if you have any questions or concerns at 416-978-0250, send an email to Professor Barry Wellman at eastyork@chass.utoronto.ca, or visit our website at www.chass.utoronto.ca/~eastyork.

Sincerely,
Professor Barry Wellman
Director – NetLab, University of Toronto

INTERVIEW - INFORMED CONSENT
(On Urban Centre Letterhead)

I have read and understood the conditions under which I will participate in this interview, and have received the \$20 cash. My questions have been answered to my satisfaction. I voluntarily consent to participate in the interview. I have received a copy of the consent letter.

Name (please print): _____

Signature: _____

Date: _____

I agree to allow the interviewer to tape-record the interview.

- Yes, I agree to tape-record the interview.
- No, I do not agree to tape-record the interview.

I agree to the use of a digital camera to take pictures of my household technology (such as my computer). I understand that these pictures will not include any household members or any other features that will distinguish who I am or where I live.

- Yes, I agree to digital pictures that I can view first.
- No, I do not agree to digital pictures, but prefer a sketch.

Appendix D: Overview of Digital Photo Participant Sample

<i>Household Composition</i>	
Partnered Parents	38
<i>n=</i>	22
Partnered Couples	24
<i>n=</i>	14
Single Parents	14
<i>n=</i>	8
Single Adults	9
<i>n=</i>	5
Living Alone	16
<i>n=</i>	9
Total	100
<i>n=</i>	58
<i>Home Workers</i>	
Over-Timers	30
<i>n=</i>	8
Part-timers	19
<i>n=</i>	5
Full-Timers	41
<i>n=</i>	11
Total	100
<i>n=</i>	27
<i>Immigrant Status</i>	
Non-Canadian Born	47
<i>n=</i>	27
Canadian Born	53
<i>n=</i>	31
Total	100
<i>n=</i>	58

Appendix E: Survey Respondents & Interview Participants - Profile of East York Sample

	Partnered Parents		Partnered Couples		Single Parents		Single Adults		Living Alone		Total		<i>p</i>
	Survey	Interview	Survey	Interview	Survey	Interview	Survey	Interview	Survey	Interview	Survey	Interview	
% Household Type	37	35	23	26	9	13	7	7	25	20			
<i>n=</i>	128	30	81	23	30	11	24	6	87	17	350	87	
% Women	59	61	54	55	83	91	54	50	53	53	58	61	0.05
<i>n=</i>	75	17	43	12	25	10	13	3	45	9	345	51	
Mean Age	41	44	49	53	44	43	28	39	51	62	45	50	0.00
<i>n=</i>	125	29	80	23	29	11	24	6	86	17	344	86	
% Employed	66	63	63	65	63	55	54	83	52	35	61	59	
<i>n=</i>	81	19	51	15	19	6	13	5	44	6	208	51	
% Work at Home	24	65	28	80	27	50	21	40	30	67	26	65	
<i>n=</i>	21	13	15	12	5	3	3	2	13	4	57	34	
% Undergrad Degree	35	45	39	13	7	9	25	33	20	29	29	34	0.000
<i>n=</i>	45	13	31	3	2	1	6	2	17	5	101	29	
% Advanced Degree	17	21	24	35	7	0	4	0	5	12	14	19	
<i>n=</i>	22	6	19	8	2	0	1	0	4	2	48	16	
Mean Household Income	50000-75000	50000-75000	50000-75000	50000-75000	40000-50000	40000-50000	50000-75000	40000-50000	40000-50000	50000-75000	50000-75000	50000-75000	
<i>n=</i>	87	19	57	15	27	10	19	5	59	10	249	59	

Appendix F: The Connected Lives Survey



If you have any questions or concerns, feel free to contact us.



Professor Barry Wellman

Centre for Urban & Community Studies

University of Toronto

455 Spadina Avenue

Toronto M5S 2G8

tel: 416-978-0250

fax: 416-978-7162

email: info@connectedlives.ca



REMEMBER TO INCLUDE THE CONSENT FORM
WHEN RETURNING THE SURVEY



GUIDE TO THE CONNECTED LIVES SURVEY

Dear Participant,

To make answering our survey a more pleasurable experience for you, we offer you a “road map” of our survey and some useful tips for filling it out.

First of all, there are no right or wrong answers to our questions. We are interested in your personal opinions.

When answering our questions, please select answers based on your own experiences. If you do not find an answer that completely meets your experiences or opinions, please check the answer closest to it.

If your first language is not English, you might want to use the help of somebody else in putting down your answers. If you use somebody else’s help, please remember that we are interested in your personal opinions and experiences, and not those of the person helping you.

As you fill out the survey, you will see little symbols to help you. Each question will also have brief instructions.

CHECKBOX: If you see some circles ₁ ₂ ₃ please check One: ₂
(The little number next to the box is for technical reasons.)

SQUARE CHECKBOX: ₁ ₂ ₃ Same as above, except you can check all that apply.

FILL-IN (1): If you see a please fill in a value: **15**

FILL-IN (2): If you see [] then please fill in a value: [**Parent**]

QUESTION: means the start of a new question

GO TO: means you might go to a new section, for example:

₁ Yes

₂ No

If you answered NO, please SKIP the rest of this page and go to PAGE 5

NOT APPLICABLE: Some questions may not apply to you. If possible, select the “not applicable” box instead of skipping the question.


MISTAKES: If you make a mistake, simply cross out the wrong answer and write/check the right answer.

For example: ₁ Unsure ₂ No ₃ Yes

TAKE YOUR TIME AND ENJOY


SECTION 1 - ABOUT YOU


- ① 1.1 What is your gender?
[Please check ONE answer]
- ₁ Male
 - ₂ Female


- ② 1.2 What year were you born? [ Please write the YEAR] 19__

- ③ 1.3 What is your highest completed level of school?
[Please check ONE answer]
- ₁ Less than high school diploma
 - ₂ High school diploma or G.E.D.
 - ₃ College or technical school diploma
 - ₄ Some university
 - ₅ Undergraduate university degree
 - ₆ Advanced university degree (such as Ph.D., Masters, law degree, medical degree)

- ④ 1.4 Are you currently a student?
[Please check ONE answer]
- ₁ No
 - ₂ Yes - full time
 - ₃ Yes - part time

- ⑤ 1.5 In what year did you begin living at your current address?
₀ Always lived at this address, or...
[ Please write the YEAR] 19__ or 20__

- ⑥ 1.6 In what year did you begin living in the Greater Toronto Area (G.T.A.)?
₀ Always lived in the Greater Toronto Area (G.T.A.), or...
[ Please write the YEAR] 19__ or 20__

- ⑦ 1.7 Which of the following do you live in?
- ₁ House (detached, semi-detached or town house)
 - ₂ Apartment building, less than 5 floors
 - ₃ Apartment building, 5 or more floors
 - ₄ Other  _____



When you need to find telephone numbers, how often do you use the following?

[Please check ONE per row]

		Daily	Weekly	Monthly	Less than monthly	I don't use this
1.8	The phone book	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.9	An address book on my computer	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.10	A personal address book (paper) or a 'Rolodex'	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.11	"Post-Its" / scraps of paper / my hand	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.12	A portable device like a Blackberry or Palm PDA	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.13	Numbers saved on my phone	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.14	Asking someone else who might know	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.15	Searching the Internet	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.16	My memory	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.17	Other _____ (1.17a)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇



To remember occasions or plan your day, how often do you use the following?

[Please check ONE per row]

		Daily	Weekly	Monthly	Less than monthly	I don't use this
1.18	Wall calendar in my home	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.19	A "day timer" or agenda	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.20	A portable device like a Blackberry or Palm PDA	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.21	A pocket or wallet calendar	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.22	My memory	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.23	"Post-its" / scraps of paper / my hand	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.24	A computer program	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.25	My assistant	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.26	Reminders from others	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇
1.27	Other _____ (1.27a)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇

SECTION 2 - YOUR COMPUTER USE

2.1 Do you currently have a computer in your home?

- ₁ Yes
₂ No

If you answered NO, please SKIP the rest of this page and go to PAGE 7

2.* Who maintains your home computer day-to-day?

[Please check ALL that apply]


I do		<input type="checkbox"/>	2
My spouse / partner		<input type="checkbox"/>	3
	Male		Female
Child(ren)	<input type="checkbox"/>	4	<input type="checkbox"/>
Friends	<input type="checkbox"/>	6	<input type="checkbox"/>
Relatives	<input type="checkbox"/>	8	<input type="checkbox"/>
Neighbours	<input type="checkbox"/>	10	<input type="checkbox"/>
Technician	<input type="checkbox"/>	12	<input type="checkbox"/>
Other _____ (2.15a)	<input type="checkbox"/>	14	<input type="checkbox"/>

2. Please tell us about your computer skills...


[Please check only ONE per row]

	Easily	With some difficulty	With help from someone I know	With help from a technician	I don't know what you mean by this
2.16	Using a word processor (such as Microsoft Word, WordPerfect, Wordpad)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.17	Using an Internet browser (such as Internet Explorer, Netscape)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.18	Downloading a file (music, picture, story) from the Internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.19	Installing a program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.20	Protecting my computer against viruses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.21	Upgrading my operating system (for example, from Windows 98 to XP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.22	Installing a home network	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION 3: YOUR INTERNET USE


 In this survey, INTERNET refers to all online activities, such as email, instant messaging, surfing the web / using Internet Explorer, chat rooms, etc...

? 3.1 Have you ever used the Internet? [Please check ONE answer]

- ₁ Yes
₂ No 

If answered NO, please SKIP the rest of this page and go to PAGE 10


? 3.2 What was the first year you used the Internet?

[ Please write the YEAR] 19__ or 20__

? 3.3 Do you currently have Internet access at home? [Please check ONE answer]

- ₁ No
₂ Yes 

3.4 How do you connect to the Internet from home?

- ₁ Dial-up access (ties up the phone line)
₂ High speed (Such as Rogers Hi-Speed or Bell Sympatico High Speed)
₃ Other:  _____ (3.4a)

? 3.5 Do you have a home network (i.e. more than one computer can be online at the same time)?

- ₁ Yes ₂ No ₉ Not Applicable (One computer in my house OR no Internet at home)

? How often do you go on the Internet from home and work/school?

[Please check only ONE per row]

		Never	Less than monthly	About Monthly	About Weekly	About Daily	All Day
3.6	Home	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
3.7	Work / school	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆

? What times of day do you use the Internet from home and work/school?

[Please check ALL that apply]

		Early morning 5-8am	Morning 8am-Noon	Afternoon Noon-6pm	Evening 6-11pm	Late night 11pm-5am	Not applicable
3.8	Home	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₉
3.9	Work/school	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₉

? 3.10a,b For each of home and work/school, please underline the square for when you use the Internet the most.

③ During a typical week, about how many hours do you actively use the Internet from home, and from work/school?

[Please write the NUMBER of hours per week on EVERY line that applies]

[If you are not working and not in school, please check "Not applicable", and fill out for home only.]

		# of hours →	Home	Work / school
				<input type="radio"/> ₉₉ Not applicable
3.11-2	Overall Internet use		<input type="text"/> # _____	<input type="text"/> # _____
3.13-4	For work/ school		# _____	# _____
3.15-6	For general information		# _____	# _____
3.17-8	Finding product information or shopping		# _____	# _____
3.19-20	For health information		# _____	# _____
3.21-2	Communicating with others		# _____	# _____

③ In general, how much has the Internet affected the following?

[Please check only ONE per row]

		Made it much more difficult	Made it somewhat more difficult	Has not affected it	Made it somewhat easier	Made it much easier	Don't use the Internet for this
3.23	Getting health care information	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₇
3.24	Shopping	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₇
3.25	Managing money	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₇
3.26	Connecting with household members	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₇
3.27	Connecting with relatives	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₇
3.28	Connecting with friends	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₇
3.29	Meeting new people	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₇
3.30	Learning about new things	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₇
3.31	The way you work	<input type="radio"/> ₀	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₇

③ 3.32 How much would you miss going on the Internet, if you could no longer do so?

- ₁ Very much
- ₂ Somewhat
- ₃ Very little
- ₄ Not at all

3.33 How many email accounts do you have that you use regularly? [Please check ONE]
 0 1 2 3 4 5 or more

3.34-3.41 During a typical week, how many emails do you send from home, and from work/school?
 [Please write the NUMBER of emails on EVERY line]
 [Not working and not in school, please check "Not applicable", and fill out for home only.]

		# of emails: →	Home	Work / School
				<input type="radio"/> Not applicable
3.34,35	To household members		# _____	# _____
3.36,37	To relatives		# _____	# _____
3.38,39	To friends		# _____	# _____
3.40,41	Work / school related		# _____	# _____

3.42-3.50 When you need to find email addresses, how often do you use the following?
 [Please check ONE per row]

		Daily	Weekly	Monthly	Less than monthly	I don't use this
3.42	Email program automatically completes addresses	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 7
3.43	A personal address book (paper) or a 'Rolodex'	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 7
3.44	Search address book on my computer	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 7
3.45	Address book on my Blackberry or PDA	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 7
3.46	My memory	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 7
3.47	Use address from an existing message	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 7
3.48	Ask someone else who might know	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 7
3.49	"Post-its" / scraps of paper / my hand	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 7
3.50	Search for address on the Internet	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 7

3.51-53 Have you ever used the Internet to communicate about physical health or mental health?
 [Please check ALL that apply]

- With a doctor or other health care professional No 1 Yes 2
- With friends or family members No 1 Yes 2
- With other people with similar health care issues No 1 Yes 2

SECTION 4 - YOUR JOB



4.1 What is your current employment status?

[Please check ONE and fill out the question NEXT to your answer]

₁ Not employed →

4.2 Which of the following best describes your situation?

₁ Between jobs / unemployed
 ₂ Full-time homemaker
 ₃ Student
 ₄ Retired
 ₅ Disability / long-term leave
 ₆ Other: (Please specify) ✍ _____ (4.2a)

If you are not currently employed, please SKIP the rest of this page and go to PAGE 13

₂ Self-employed →

4.3 Do you employ other people?

₁ No
 ₂ Yes How many? ✍ # _____ (4.3a)

4.3b How many clients / customers do you have in a year?
✍ # _____ or ₉₉₉₉ Not applicable

₃ Employee →

4.4 About how many people does your company employ?
[Please check ONE answer]

₁ 1-24 employees ₂ 25-99 employees
 ₃ 100-499 employees ₄ 500 or more employees



4.5 Do you have a second paid job?

[Please check ONE answer]

- ₁ No
 ₂ Yes - second job is self-employed
 ₃ Yes - second job is an employee

④ 4.6,7 What is your paid occupation?

[If you have MORE THAN TWO JOBS, please refer to the two jobs you consider MOST IMPORTANT.]

Main job ✎ _____

Second job ✎ _____

④ 4.8,9 On average, how many hours per week do you work?

Main job ✎ # _____ hours per week

Second job ✎ # _____ hours per week

④ During a typical week, what percentage of your work time is spent at the following places?

4.10 ✎ % _____ Working at home

4.11 ✎ % _____ At a regular workplace outside the home (such as office, factory, shop)

4.12 ✎ % _____ Travelling (for example, to job sites, clients, business trips)

4.13 ✎ % _____ At someone else's regular workplace (such as client's office, trade show, supplier's office)

④ 4.14 Do you have an email account for work?

[Please check ONE answer]

₁ No

₂ Yes - exclusively for work


₃ Yes - for work and other reasons

④ 4.15 Do you do any paid work at home?

[Please check ONE answer]

₁ Yes

₂ No

 *If NO then please SKIP the rest of this page and go to PAGE 13*

④ 4.16,7 On average, how many hours per week do you work AT HOME?

Main job ✎ # _____ hours at home per week

Second job ✎ # _____ hours at home per week

- ④ 4.* Is your work at home... [Please check ALL that apply]
- ₁₈ Related to your main job
 - ₁₉ Related to your second job

- ④ 4.* Is your work at home... [Please check ALL that apply]
- ₁ Overtime
 - ₁ Regular work instead of going to another workplace

- ④ 4.* What are your main reasons for working at home? [Please check ALL that apply]
- ₂₂ It is a requirement of the job
 - ₂₃ To catch up with work
 - ₂₄ Better working conditions at home
 - ₂₅ To avoid commuting
 - ₂₆ It saves time
 - ₂₇ It saves money
 - ₂₈ Childcare
 - ₂₉ Other family responsibilities
 - ₃₀ For my health
 - ₃₁ Other: (4.31a)

[PLEASE LOOK AGAIN AT YOUR ANSWERS ABOVE
AND CIRCLE THE MOST IMPORTANT REASON FOR WORKING AT HOME]

- ④ 4.* Thinking about a typical day when you work at home:
How many times per DAY while you are home...

DO YOU CONTACT
people related to work:

ARE YOU CONTACTED BY
people related to work:





[Write a NUMBER below for each activity even if you do it zero times during a typical day]

- | | |
|---|--|
| 32 I set up conference calls ✍ # _____ times | 38 They set up conference calls ✍ # _____ times |
| 33 I invite work contacts home ✍ # _____ times | 39 They invite me to their home for work ✍ # _____ times |
| 34 I send a fax ✍ # _____ times | 40 They send me a fax ✍ # _____ times |
| 35 I start an instant messaging session ✍ # _____ times | 41 They start an instant messaging session ✍ # _____ times |
| 36 I phone ✍ # _____ times | 42 They send work-related email ✍ # _____ times |
| 37 I leave voice mail ✍ # _____ times | 43 They phone ✍ # _____ times |
| | 44 They leave voice mail ✍ # _____ times |

SECTION 5 - YOUR SPOUSE / PARTNER

5.1 What is your current relationship status?

[Please check ONE answer]

- 1 Married
- 2 Common-law
- 3 Long-term relationship
- 4 Single 
- 5 Divorced 
- 6 Widowed 
- 7 Separated 

If you are currently single, divorced, widowed or separated, please SKIP the rest of this page and go to PAGE 15.

5.2 Do you live with your spouse/partner? [Please check ONE answer]

- 1 No
- 2 Yes →

5.3 What year did you begin living together?

[Please write the YEAR] 19__ or 20__

5.4 What is your spouse/partner's gender? [Please check ONE answer]

- 1 Male
- 2 Female

5.6 What is your spouse/partner's highest completed level of school?

[Please check ONE answer]

- 1 Less than high school diploma
- 2 High school diploma or G.E.D.
- 3 College or technical school diploma
- 4 Some university
- 5 Undergraduate university degree
- 6 Advanced university degree (such as Ph.D, Masters, law degree, medical degree)

5.7 Which of the follow best describes your spouse / partner's employment status?

[Please check only ONE answer]

- 01 Self-employed
- 02 Employed full-time
- 03 Employed part-time
- 04 Between jobs / unemployed
- 05 Full-time homemaker
- 06 Student
- 07 Retired
- 08 Disability / long-term leave
- 09 Other: (Please specify) _____ (5.7a)

5.8 What is your spouse / partner's main occupation? _____

⓪ During a typical week, how many hours do you spend with your spouse/partner...

[Please check ONE per row]

of hours: 0 1-4 5-8 9-12 13-16 17-20 21+

(average 1 hour /day) (average 2 hours /day)

	0	1-4	5-8 (average 1 hour /day)	9-12	13-16 (average 2 hours /day)	17-20	21+
5.9 Overall (not including sleep)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
5.10 Watching TV	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
5.11 Using the Internet	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
5.12 Doing other recreational things	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇

⓪ How often do you...

[Please check ONE per row]

	Not Applicable	Never	Less than monthly	About Monthly	About Weekly	About Daily
5.13 Call your spouse/partner from a cell phone	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
5.14 Call your spouse/partner from a regular phone	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
5.15 Email your spouse/partner when you are both in the same house	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
5.16 Email your spouse/partner when you are NOT in the same house	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
5.17 Instant message your spouse/partner when you are both in the same house	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
5.18 Instant message your spouse/partner when you are NOT in the same house	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅

SECTION 6 - YOUR CHILDREN

? 6.1 Do you have any children? [Please check ONE answer]

₁ Yes

₂ No

If you answered NO, please SKIP the rest of this page and go to PAGE 17

? Please fill out following chart: Start with the oldest child. If you have more than 4, please fill out for the 4 oldest. For each child,

(1) What are their ages? [For example: "6"]

(2) What is their gender?

(3) Are they living with you?

(4) What is the highest schooling they've completed? [For example: "primary"/"high school"]

(5) Do they have cell phones?

(6) Are they experienced computer users?

	Age	Gender	Lives at home	Highest schooling completed	Has a cell phone	Experienced computer user
6.2-7	First Child []	<input type="radio"/> ₁ Male <input type="radio"/> ₂ Female	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	[]	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No
6.8-13	Second Child []	<input type="radio"/> ₁ Male <input type="radio"/> ₂ Female	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	[]	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No
6.14-19	Third Child []	<input type="radio"/> ₁ Male <input type="radio"/> ₂ Female	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	[]	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No
6.20-25	Fourth Child []	<input type="radio"/> ₁ Male <input type="radio"/> ₂ Female	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	[]	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No

⑦ During a typical week, in total how many hours do you spend with your child(ren)...
 [Please check only ONE per row]

		# of hours: →						
		0	1-4	5-8 (average 1 hour /day)	9-12	13-16 (average 2 hours /day)	17-20	21+
6.38	Overall (not including sleep)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
6.39	Watching TV	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
6.40	Using the Internet	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
6.41	Doing other recreational things	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇

⑦ How often do you....
 [Please check only ONE per row]

		Not Applicable	Never	Less than monthly	About Monthly	About Weekly	About Daily
6.26	Call your child(ren) from a cell phone	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
6.27	Call your child(ren) from a regular telephone	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
6.28	Email your child(ren) when you are both in the same house	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
6.29	Email your child(ren) when you are NOT in the same house	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
6.30	Instant message your child(ren) when you are both in the same house	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
6.31	Instant message your child(ren) when you are NOT in the same house	<input type="radio"/> ₉	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅

⑦ 6.* At home, who is mainly responsible for monitoring your child(ren)'s Internet use?
 [Please check ALL that apply]

- ₉ Not applicable - we do not have the Internet at home
- ₃₂ My child(ren) monitor themselves
- ₃₃ I monitor my children
- ₃₄ My spouse/partner monitors the children
- ₃₅ We are equally responsible for monitoring
- ₃₆ We use computer software to monitor the children
- ₃₇ Other: _____ (6.37a)

SECTION 7 - OTHER HOUSEHOLD MEMBERS



If your household consists only of you, a spouse/partner and/or children, please SKIP this page and go to PAGE 18.

In this section, we would like to know a little bit about any other people who live in your home and share the SAME KITCHEN with you.

⓪ Please fill out this chart for the 4 oldest household members that have not been mentioned yet, starting with the oldest. For each member,

- (1) How old are they? [For example: “39”]
- (2) What is their gender?
- (3) What is their relations to you? [For example: “grandmother”, “roommate”]
- (4) Do they have cell phones?
- (5) Are they experienced computer users?

	Age	Gender	Relation to you	Has a cell phone	Experienced computer user
7.1-5	Member 1 []	<input type="radio"/> ₁ Male <input type="radio"/> ₂ Female	[]	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No
7.6-10	Member 2 []	<input type="radio"/> ₁ Male <input type="radio"/> ₂ Female	[]	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No
7.11-15	Member 3 []	<input type="radio"/> ₁ Male <input type="radio"/> ₂ Female	[]	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No
7.16-20	Member 4 []	<input type="radio"/> ₁ Male <input type="radio"/> ₂ Female	[]	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No	<input type="radio"/> ₁ Yes <input type="radio"/> ₂ No

HOUSEHOLD JOBS

? During a typical week, how many hours do **you** spend at home doing the following...
 [Please check only ONE per row]

	# of hours: →	0	1-4	5-8 (average 1 hour /day)	9-12	13-16 (average 2 hours /day)	17-20	21+
7.21	Household chores and cleaning	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
7.22	Cooking and baking	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
7.23	Yard work and gardening	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
7.24	Home repair and maintenance	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
7.25	Childcare	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇

? During a typical week, how many hours does **your spouse/partner** spend at home doing the following...

[Please check only ONE per row]

₉ Not Applicable (skip the table and go to the question below)

	# of hours: →	0	1-4	5-8 (average 1 hour /day)	9-12	13-16 (average 2 hours /day)	17-20	21+
7.26	Household chores and cleaning	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
7.27	Cooking and baking	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
7.28	Yard work and gardening	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
7.29	Home repair and maintenance	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇
7.30	Childcare	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆	<input type="radio"/> ₇

? 7.31 Does someone else in the household do these tasks?

[Please check ONE answer]

₁ No

₂ Yes →

7.32 If YES: What is this person's relation to you?

? During a typical week how do **you** do the the following, and how long does it take you?
 [Please check ALL that apply & TOTAL HOURS per week]

	Yourself	Online	Phone	In person	Total hours per week
7.*	Keeping in touch with friends	<input type="checkbox"/> 33	<input type="checkbox"/> 34	<input type="checkbox"/> 35	→ 36 ✍️ # _____
7.*	Keeping in touch with family	<input type="checkbox"/> 37	<input type="checkbox"/> 38	<input type="checkbox"/> 39	→ 40 ✍️ # _____
7.*	Arranging social events with family or friends	<input type="checkbox"/> 41	<input type="checkbox"/> 42	<input type="checkbox"/> 43	→ 44 ✍️ # _____
7.*	Shopping	<input type="checkbox"/> 45	<input type="checkbox"/> 46	<input type="checkbox"/> 47	→ 48 ✍️ # _____
7.*	Taking care of finances	<input type="checkbox"/> 49	<input type="checkbox"/> 50	<input type="checkbox"/> 51	→ 52 ✍️ # _____

? During a typical week, how does **your spouse/partner** do the following, and how long does it take?
 [Please check ALL that apply & TOTAL HOURS per week]

Not Applicable - I don't have a spouse/partner (skip the table and go to the question below)

	Your spouse/partner	Online	Phone	In person	Total hours per week
7.*	Keeping in touch with friends	<input type="checkbox"/> 53	<input type="checkbox"/> 54	<input type="checkbox"/> 55	→ 56 ✍️ # _____
7.*	Keeping in touch with family	<input type="checkbox"/> 57	<input type="checkbox"/> 58	<input type="checkbox"/> 59	→ 60 ✍️ # _____
7.*	Arranging social events with family or friends	<input type="checkbox"/> 61	<input type="checkbox"/> 62	<input type="checkbox"/> 63	→ 64 ✍️ # _____
7.*	Shopping	<input type="checkbox"/> 65	<input type="checkbox"/> 66	<input type="checkbox"/> 67	→ 68 ✍️ # _____
7.*	Taking care of finances	<input type="checkbox"/> 69	<input type="checkbox"/> 70	<input type="checkbox"/> 71	→ 72 ✍️ # _____

? 7.* Does someone else in the household do these tasks?
 [Please check ALL that apply]

No

73 Yes, online →

74 Yes, by phone →

75 Yes, in person →

7.76 What is this person's relation to you?
 ✍️ _____

SECTION 8 - COMMUNICATING WITH HOUSEHOLD MEMBERS

? Please write the number of devices in each of the following rooms...
 [Please write the NUMBER in each space]

		Telephones	TVs	Personal computers
8.1-3	Kitchen	# _____	# _____	# _____
8.4-6	Rec room / family room	# _____	# _____	# _____
8.7-9	Office / study	# _____	# _____	# _____
8.10-12	Living room	# _____	# _____	# _____
8.13-15	Master bedroom	# _____	# _____	# _____
8.16-18	Child(ren)'s bedroom (If there is more than 1 room, write the total for all bedrooms)	# _____	# _____	# _____
8.19-22	Other 1: (such as spare bedroom) _____ (8.19)	# _____	# _____	# _____
8.23-26	Other 2: _____ (8.23)	# _____	# _____	# _____

? If you DO NOT have Internet access at home, then please SKIP the rest of this page and go to PAGE 21

? Please indicate how much you agree with the following...
 [Please check only ONE box per row]

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Not applicable
8.27	Emailing has improved how I communicate with household members	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₉
8.28	Instant messaging has improved how I communicate with household members	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₉
8.29	The Internet has replaced time together as a household	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₉

		Never	Some of the time	About half of the time	Most of the time	All of the time
8.30	Are there disagreements among household members about who gets to use the Internet?	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
8.31	Are there disagreements among household members about someone using the Internet too much?	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
8.32	Do household members interrupt you when you are on the Internet at home?	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅

SECTION 9 - YOUR PERSONAL COMMUNITY

In this section, we are interested in learning about how you spend time with people **outside your household**.

? How often do you...? *[Please check only ONE per row]*

		Daily	A few times a week	Once a week	A few times a month	Monthly or less	Never
9.1	Attend a regularly scheduled meeting such as a sports league, volunteer organization, or church group	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.2	Go to a regular hangout where you will know people (for example: a community centre, bar, mall, or coffee shop)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.3	Drop into someone's house unannounced (or call just a few minutes ahead of time)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.4	Have a conversation with your neighbours	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.5	Talk to people in an online chat room	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆

? 9.6 Which best describes how you spend your leisure time with people outside your household?

[Please check ONE answer]

- ₁ Spend most of my leisure time by myself
- ₂ Spend most of it with just one or two people, who are usually the same people
- ₃ Spend most of it with just one or two people, who change from day to day
- ₄ Spend most of it with a single group of people
- ₅ Divide my time among different groups of people

Please think about the people currently in your life who do not live with you. We would like you to consider those who you are VERY close to, and those who you are SOMEWHAT close to.

VERY CLOSE:

- Those that you discuss important matters with,
- Those that you regularly keep in touch with, or
- Those who are there for you if you need help.

SOMEWHAT CLOSE:

- More than just casual acquaintances, but not 'very close'.

In this section you'll find it helpful to use the attached tear-off worksheet. There is no need to return the worksheet with the survey.

- ① About how many people are you **VERY** close to?
 About how many people are you **SOMEWHAT** close to?

[Count each person only ONCE, use the WORKSHEET to remember names]
 [Please count only people OUTSIDE your HOME]

		VERY close	SOMEWHAT close
9.7,8	Members of your immediate family who don't live with you (such as parents, siblings, children)	<i>✍</i> # _____	<i>✍</i> # _____
9.9,10	Other relatives	# _____	# _____
9.11-2	Neighbours	# _____	# _____
9.13-4	People you currently work with, or go to school with	# _____	# _____
9.15-6	People you know only online	# _____	# _____
9.17-8	People from organizations (such as church, sports leagues, business associations)	# _____	# _____
9.19-20	Friends not included above	# _____	# _____
9.21-2	Other people not included above Relationship to you: [_____] (9.22a)	# _____	# _____

The next few pages will be about these two types of people - those you feel **VERY** close to and those you feel **SOMEWHAT** close to. Please refer to the worksheet if you need to refresh your memory.

[Please write the NUMBER in each space]

?	About how many of these two types of people...	VERY close	SOMEWHAT close
9.23-4	Women	/ # _____	/ # _____
9.25-6	Men	/ # _____	/ # _____

?	About how many of these two types of people...	VERY close	SOMEWHAT close
9.27-8	Live in Canada and more than an hour's travel away	/ # _____	/ # _____
9.29-30	Live outside of Canada	/ # _____	/ # _____

?	About how many of these two types of people...	VERY close	SOMEWHAT close
9.31-2	Do you call by cell phone , typically at least once a week	/ # _____	/ # _____
9.33-4	Do you call by cell phone , typically between once a week and once a month	# _____	# _____
9.35-6	Do you call by telephone , typically at least once a week	# _____	# _____
9.37-8	Do you call by telephone , typically between once a week and once a month	# _____	# _____
9.39-40	Do you send an email to, typically at least once a week	# _____	# _____
9.41-2	Do you send an email to, typically between once a week and once a month	# _____	# _____
9.43-4	Do you send an instant message to, typically at least once a week	# _____	# _____
9.45-6	Do you send an instant message to, between once a week and once a month	# _____	# _____
9.47-8	Do you talk with face to face , typically at least once a week	# _____	# _____
9.49-50	Do you talk with face to face , typically between once a week and once a month.	# _____	# _____
9.51-2	Meet you at a bar or restaurant , typically at least once a week	# _____	# _____
9.53-4	Meet you at a bar or restaurant , typically between once a week and once a month	# _____	# _____
9.55-6	Visit you at home (or will have you as a visitor), typically at least once a week.	# _____	# _____
9.57-8	Visit you at home (or will have you as a visitor), typically between once a week and once a month	# _____	# _____

? Think about planning with all of the people who are **VERY** close. In total, how often do you do the following...

[Please check only ONE per row]

	VERY Close	About Daily	A few times a week	Once a week	A few times a month	Monthly or less	Never
9.59	Make plans in person	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.60	Make plans by cell phone (voice)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.61	Make plans by cell phone (text)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.62	Make plans by regular phone	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.63	Make plans by email	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.64	Make plans by instant messaging	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.65	Reschedule your plans	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.66	Break your plans	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.67	Forget to meet someone	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.68	Arrive late	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆

? Think about planning with all of the people who are **SOMEWHAT** close. In total, how often do you do the following...

[Please check only ONE per row]

	SOMEWHAT Close	About Daily	A few times a week	Once a week	A few times a month	Monthly or less	Never
9.69	Make plans in person	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.70	Make plans by cell phone (voice)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.71	Make plans by cell phone (text)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.72	Make plans by regular phone	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.73	Make plans by email	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.74	Make plans by instant messaging	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.75	Reschedule your plans	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.76	Break your plans	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.77	Forget to meet someone	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆
9.78	Arrive late	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	<input type="radio"/> ₆

② When talking with people you are **VERY** close to, how often do you get new information about...
 [Please check only ONE box per row]

	VERY Close	About Daily	About Weekly	About Monthly	Less than monthly	I do not discuss this
9.79	Political issues	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.80	Musicians or musical groups	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.81	Restaurants	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.82	Movies	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.83	Books	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.84	Issues related to your job	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅

② When talking with people **SOMEWHAT** close, how often do you get new information about...
 [Please check only ONE box per row]

	SOMEWHAT Close	About Daily	About Weekly	About Monthly	Less than monthly	I do not discuss this
9.85	Political issues	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.86	Musicians or musical groups	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.87	Restaurants	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.88	Movies	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.89	Books	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
9.90	Issues related to your job	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅

9. Do you know someone **VERY** close or **SOMEWHAT** close who does any of the following jobs?
 [Please check ALL that apply]

		VERY close	SOMEWHAT close
9.*	Lawyer	<input type="checkbox"/> ₉₁	<input type="checkbox"/> ₉₂
9.*	Truck driver	<input type="checkbox"/> ₉₃	<input type="checkbox"/> ₉₄
9.*	Pharmacist	<input type="checkbox"/> ₉₅	<input type="checkbox"/> ₉₆
9.*	Janitor or caretaker	<input type="checkbox"/> ₉₇	<input type="checkbox"/> ₉₈
9.*	Engineer	<input type="checkbox"/> ₉₉	<input type="checkbox"/> ₁₀₀
9.*	Cashier	<input type="checkbox"/> ₁₀₁	<input type="checkbox"/> ₁₀₂
9.*	Waiter or waitress	<input type="checkbox"/> ₁₀₃	<input type="checkbox"/> ₁₀₄
9.*	Carpenter	<input type="checkbox"/> ₁₀₅	<input type="checkbox"/> ₁₀₆
9.*	Computer programmer	<input type="checkbox"/> ₁₀₇	<input type="checkbox"/> ₁₀₈
9.*	High school teacher	<input type="checkbox"/> ₁₀₉	<input type="checkbox"/> ₁₁₀
9.*	Human resources manager	<input type="checkbox"/> ₁₁₁	<input type="checkbox"/> ₁₁₂

9. How many of the following people know each other?
 [Please check only ONE per row]

		None know each other	know each other	Only some know each other	About half each other	Most know each other	They all know each other
9.113	Only the people you feel SOMEWHAT close to	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	
9.114	Only the people you feel VERY close to	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	
9.115	ALL of these people TOGETHER	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅	

SECTION 10: YOUR CULTURAL HERITAGE



- ② While many people in Canada view themselves as Canadians, to what ethnic or cultural group did your ancestors belong? (For example, English, Chinese, East Indian, or French)

[If they belonged to more than one group, please list the 1 or 2 ethnic groups that you most closely identify with]




10.1  _____

10.2  _____

Thinking again of the people you are **Very** close to or **Somewhat** close to...


② About how many of these people are your own ethnicity?	VERY close	SOMEWHAT close
10.3-4	 # _____	 # _____

[Please write the NUMBER in each space even if the number is zero]

② Not including those of your own ethnicity, about how many of these people are...	VERY close	SOMEWHAT close
10.5-6 Hispanic or Latino	 # _____	 # _____
10.7-8 South Asian (such as Indian, Pakistani, Sri Lankan)	# _____	# _____
10.9-10 East Asian (such as Chinese, Filipino, Korean, Thai)	# _____	# _____
10.11-12 Middle Eastern (such as Lebanese, Iranian)	# _____	# _____
10.13-14 First Nations, Inuit, Métis	# _____	# _____
10.15-16 Black or African-Canadian	# _____	# _____
10.17-18 White	# _____	# _____
10.19-20 Other  _____ (10.20a)	# _____	# _____

- ② 10.20b What language do you speak most often at home?

English, or...

 Please write the language] _____


- ② 10.21 In what country were you born?

Canada, or...

[Please write the country]

 _____ and... →

10.22 What year did you arrive in Canada?

[ Please write the YEAR]

19__ or 20__

SECTION 11 - SOCIAL SUPPORT

This section is about the help you receive from and give to others.

- ② Please look at the following situations.
 Circle the groups of people who you would receive help from, and who you would give help to.
 [For this page, please CIRCLE ALL That Apply]
 [Use the WORKSHEET to refresh your memory]

	Household members	Immediate Family	Other Relatives	Neighbours	currently go to School with	know only Work with	from oRganizations	Other FRiends	Other
Advice on important matters									
Receive advice from	HH ₀	IF ₁	OR ₂	N ₃	WS ₄	NL ₅	RG ₆	FR ₇	OT ₈
Give advice to	HH ₁₀	IF ₁₁	OR ₁₂	N ₁₃	WS ₁₄	NL ₁₅	RG ₁₆	FR ₁₇	OT ₁₈
Advice about new job opportunities									
Receive advice from	HH ₂₀	IF ₂₁	OR ₂₂	N ₂₃	W ₂₄	NL ₂₅	RG ₂₆	FR ₂₇	OT ₂₈
Give advice to	HH ₃₀	IF ₃₁	OR ₃₂	N ₃₃	WS ₃₄	NL ₃₅	RG ₃₆	FR ₃₇	OT ₃₈
Care for a serious health condition									
Receive care from	HH ₄₀	IF ₄₁	OR ₄₂	N ₄₃	WS ₄₄	NL ₄₅	RG ₄₆	FR ₄₇	OT ₄₈
Provide care to	HH ₅₀	IF ₅₁	OR ₅₂	N ₅₃	WS ₅₄	NL ₅₅	RG ₅₆	FR ₅₇	OT ₅₈
Help with home renovations									
Receive help from	HH ₆₀	IF ₆₁	OR ₆₂	N ₆₃	WS ₆₄	NL ₆₅	RG ₆₆	FR ₆₇	OT ₆₈
Give help to	HH ₇₀	IF ₇₁	OR ₇₂	N ₇₃	WS ₇₄	NL ₇₅	RG ₇₆	FR ₇₇	OT ₇₈
Help looking for information about a health issue									
Receive help from	HH ₈₀	IF ₈₁	OR ₈₂	N ₈₃	WS ₈₄	NL ₈₅	RG ₈₆	FR ₈₇	OT ₈₈
Give help to	HH ₉₀	IF ₉₁	OR ₉₂	N ₉₃	WS ₉₄	NL ₉₅	RG ₉₆	FR ₉₇	OT ₉₈
Advice on using a personal computer									
Receive advice from	HH ₁₀₀	IF ₁₀₁	OR ₁₀₂	N ₁₀₃	WS ₁₀₄	NL ₁₀₅	RG ₁₀₆	FR ₁₀₇	OT ₁₀₈
Give advice to	HH ₁₁₀	IF ₁₁₁	OR ₁₁₂	N ₁₁₃	WS ₁₁₄	NL ₁₁₅	RG ₁₁₆	FR ₁₁₇	OT ₁₁₈
To be there just to talk about the day									
They will be there to listen to you	HH ₁₂₀	IF ₁₂₁	OR ₁₂₂	N ₁₂₃	WS ₁₂₄	NL ₁₂₅	RG ₁₂₆	FR ₁₂₇	OT ₁₂₈
You will be there to listen to them	HH ₁₃₀	IF ₁₃₁	OR ₁₃₂	N ₁₃₃	WS ₁₃₄	NL ₁₃₅	RG ₁₃₆	FR ₁₃₇	OT ₁₃₈

② Are you a member of any voluntary organizations? Yes No
 Are you an active member, that is, you regularly attend meetings, contribute time or money, or hold a leadership position.

[Please check ONE per row & NUMBER of years]

		Not a member	Member, but not active	Active member		Number of years as an active member
11.139	Business association	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.139a)	# _____
11.140	Professional association	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.140a)	# _____
11.141	A sport's league	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.141a)	# _____
11.142	Your child's sports league	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.142a)	# _____
11.143	Religious organization	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.143a)	# _____
11.144	Hobby group or club	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.144a)	# _____
11.145	Community service group	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.145a)	# _____
11.146	Ethnic association	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.146a)	# _____
11.147	Environmental group	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.147a)	# _____
11.148	Labour union	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.148a)	# _____
11.149	Women's group	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.149a)	# _____
11.150	Other _____ (11.150b)	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃ →	(11.150a)	# _____

SECTION 12 - YOUR OPINIONS

② How much do you agree or disagree with the following statements? [Please check ONE per row]

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
12.1	I am responsible for my own successes	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.2	I can do just about anything I really set my mind to	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.3	My misfortunes are the result of mistakes I have made	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.4	The really good things that happen to me are mostly luck	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.5	Most of my problems are due to bad breaks	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.6	I have little control over the bad things that happen to me	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.7	I am responsible for my failures	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.8	There is no sense planning a lot - if something is going to happen it will	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅

SECTION 12 - YOUR OPINIONS (CONTINUED)

? How much do you agree or disagree with the following statements? *[Please check ONE per row]*

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
12.9	I am outgoing and sociable	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.10	I am original, coming up with new ideas	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.11	I am reserved	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.12	I am sometimes shy and inhibited	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.13	I have an active imagination	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.14	I have an assertive personality	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.15	I am curious about many different things	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.16	I am talkative	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.17	I prefer work that is routine	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.18	I like to explore new art, music or literature	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.19	I tend to be quiet	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅

? How much do you agree or disagree with the following statements? *[Please check ONE per row]*

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
12.20	We should be more tolerant of people who choose to live according to their own standards, even if they are very different from our own	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.21	We have gone too far in pushing equal rights in this country	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.22	This country would have fewer problems if there were more emphasis on traditional family values	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅
12.23	It is more difficult for non-whites to be successful in Canadian society than it is for whites	<input type="radio"/> ₁	<input type="radio"/> ₂	<input type="radio"/> ₃	<input type="radio"/> ₄	<input type="radio"/> ₅

? 12.24 Do you generally think of yourself as being a little closer to one of the federal parties than to the others? Please check which party you think you are closest to...

₁ Conservative ₂ Liberal ₃ NDP ₄ Other  _____ (12.24a)

SECTION 13 - CONCLUSION

- ?** 13.1 Do you have a particular religion or faith? [Please check ONE answer]
- 1 None
 - 2 Protestant - Which denomination? (13.2) _____
 - 3 Roman Catholic
 - 4 Muslim / Islamic
 - 5 Hindu
 - 6 Sikh
 - 7 Confucian
 - 8 Other (13.3) _____

- ?** 13.4 What was your PERSONAL income last year before taxes?
[Please check ONE answer]
- | | |
|------------------------------|-------------------------|
| Under \$20,000 | <input type="radio"/> 1 |
| \$20,000 to under \$30,000 | <input type="radio"/> 2 |
| \$30,000 to under \$40,000 | <input type="radio"/> 3 |
| \$40,000 to under \$50,000 | <input type="radio"/> 4 |
| \$50,000 to under \$75,000 | <input type="radio"/> 5 |
| \$75,000 to under \$100,000 | <input type="radio"/> 6 |
| \$100,000 to under \$150,000 | <input type="radio"/> 7 |
| \$150,000 or more | <input type="radio"/> 8 |

- ?** 13.4 What was your HOUSEHOLD income last year before taxes?
[Please check ONE answer]
- | | |
|------------------------------|-------------------------|
| Under \$20,000 | <input type="radio"/> 1 |
| \$20,000 to under \$30,000 | <input type="radio"/> 2 |
| \$30,000 to under \$40,000 | <input type="radio"/> 3 |
| \$40,000 to under \$50,000 | <input type="radio"/> 4 |
| \$50,000 to under \$75,000 | <input type="radio"/> 5 |
| \$75,000 to under \$100,000 | <input type="radio"/> 6 |
| \$100,000 to under \$150,000 | <input type="radio"/> 7 |
| \$150,000 or more | <input type="radio"/> 8 |

On behalf of the NetLab team at the University of Toronto, thank you very much for completing this survey.

Someone should be dropping by your house soon to pick up your survey.
If you would like to arrange a specific time for pick-up please call 416-978-0250.



REMEMBER TO INCLUDE THE CONSENT FORM
WHEN RETURNING THE SURVEY



☺☺☺ Thank You ☺☺☺

FOR OFFICE USE ONLY

	Sur. # / Par #
	Survey Version 1.1.2, July 18, 2004.

Appendix G: Connected Lives Interview Questions

Connected Lives: Communication, Technology and Society Project
Interview Guide

Before Interview starts:

- **Record Participant Number on Consent Form before interview**
- **Go over consent form and get signature**
- **Give Participant Cash**
- **Test the recording device**
- **Record/Announce Participant Number**
- **Record/Announce Date and your name**

Interview Information:

Participant #: _____

Date: _____

Interviewer: _____

***Note: Are there other household members present during the interview?**

- Yes – Who?** _____
- No**

***Note: Is the Interview being held at the Participant's home?**

- Yes**
- No – Where?** _____

Introduction to Interview

First, I would like to thank you for letting me come into your home to talk to you. I would like to go beyond the survey to discuss more about how you use technology and also talk about your social interactions.

Section One: Household

Introduction to Household Members

- ➔ Tell me a little about the **people in your home**. Who lives here and what is their relationship to you? (*check for husband/ wife/ partner*)
- ➔ What is a **typical day** like for you in your household? What is the routine, what do you do? (*who does chores like housecleaning, cooking, shopping etc*)
- ➔ Is it different on the **weekend**? How so?

[Discussion about household tasks here – probing about daily activities and who does what, how this came to be]

- Do you have a set **routine** or schedule? How is it working for you? (*too much to do, comfortable, frustrated, content*) How did it come about? Are there any **changes** you'd make? (*Spend less time washing dishes etc*)
- What do you like to do in **your spare time**? (by yourself, with partner/spouse/ household members) (*watch tv, read, play cards, go to movies etc*).
- How **often** do you do this? Would you do it more if you could? (Why/not?)
- What about going out **socially** to visit family, friends, neighbours or people you work with? **Who** do you go out with? How **often** do you do that? Would you do it more if you could? (Why /not?)
- Are you working right now? Where? (*Probe: hours, location, size of company*)
- Do you do **work at home**? Can you tell me more about that? (*probe for general time of work; how did you come to the decision to work at home?*)
 - **IF SO:**
 - Tell me about the **kind of work** do you do at home. What does it involve? (*probe: specific tasks such as reading or writing reports, repairs, communication with clients, etc.*) Where do you do this work at home? (*what room*)
 - Of what you just told me, what's the most **important task**? Why?
 - What **hours** do you work at home? How did you **choose** these hours? (*probe: work related reasons such as clients available at certain time, family schedule, etc.*)
 - Can you tell me more about what **happens in the house** during this time? Where are other family/household members while you are working? If they are at home, what are they doing while you are working?
 - Do you schedule breaks for yourself? What happens when you want to take a **break**? What do you do (*probe – leave the house, spend time with children*)?
 - Do any **problems** ever come up? How do you deal with them? (*probe: interruptions from family, interruptions from colleagues, colleagues not available, etc.*)
 - When you work at home, do you try to keep your work and home life separate? **How do you go about it**? (*probe: try to keep schedule different, close door, discuss and agree with family members on when they can interrupt and when not, etc.*)

- Tell me about how working at **home affects your job** (*probe – does it make it more difficult or easier, more or less efficient, do you find it isolating, flexibly scheduled etc.*).
- What about how working at **home affects your personal life?** (*probe – do you find you are available for children, do you have more time for your family, OR do you find work related phone calls disruptive, rooms not available for family activities*).
- If we ask them, what do you think your **household members would say** about your working at home? (*probe: likes and dislikes*)
- Overall, do you think working at home **works for you?** Why (*probe for advantages and disadvantages*)

Computer Skills

- What kinds of home electronics do you have? (*probe for telephones, computing communications and media*)
- **[If they work at home]** Which of these do you use for working at home? (*probe: What's most useful?*)
- What **kind** of computer do you have? (*probe: sensitive to technical vs. brand details*).
- ➔ How **old** is it? / When did you get it? What kind of software do you use?
- ➔ Who **set it up?** How did that come about?
- ➔ If something went wrong with your computer right now, how would you **deal with** that? (*who would you call on to help you?*)
- ➔ What do you **do with** your computer? (*recipes, finances, resumes*)
- ➔ How do you **use** the computer other than using the Internet? (*money managing, work/school, writing resumes etc*)
- ➔ How did you **learn to use** one (*taught myself, book*)? Who first **showed** you how to use a computer (*friend, course, spouse*)? How **long ago** was that?
- ➔ How **comfortable** you are with the computer?
- ➔ Has anyone **show you stuff** recently? (*tricks, programs, websites, etc.*)
- ➔ How do you think your computer skills **compare to others** in your home? How do you feel about that? (*Wish they knew more etc*)
- ➔ How about compared to your **friends**?
- ➔ Has anyone in your household **personalized** your computer at all – like with pictures, screen savers and so forth? Why does this person do that?
- ➔ Who **manages the files** on the computer?
- ➔ (*if one computer in home*) How does **sharing** the computer work for everyone in your home? Are there any problems at all?

[Ok, let's talk about the Internet.]

Internet in home:

- ➔ Tell me a little about they **layout** of your household - number and types of rooms you have
- ➔ Does anyone have a **specialized work** space? Or where do people do their work?
- ➔ What made you decide to **get the Internet** in your home? (*for work, children, leisure*). Who's idea was it?

- ➔ How has having the Internet affected your **financial** situation – in terms of buying a computer and then getting access? (*good to earn money, cost of access a burden etc*)
- ➔ How do you **like** having Internet access in your home?

Location of Internet Access Point:

[Let's talk about where you have the Internet set up. It's in the _____.]

- ➔ (*If they have more than one computer*) You mentioned in the survey that you have _____ computers, which ones have **Internet access**? (*If they have more than one with access*) Are they **networked** at all? Who set that up?
- ➔ How did you decide to put the computer with Internet **access here**?
- ➔ Has it always been in this spot, or have you **moved** at all? (If so, how come?).
- ➔ How does having the Internet in this **spot work for you**? What about other household members? (*it's private, it's communal etc*). Would you rather have it in a **different** spot? How come?
- ➔ (*If they have more than one computer*) Which one is **used most**? How come?

Personal Internet Use:

- ➔ How many **hours** per day do you usually use the Internet during the week? What about on the weekend? (*If different, why*) (or how much time did you spend on the Internet yesterday? Is this typical?)
- ➔ When do you use the Internet **most** at home? Why at this time? (*Quiet, no one else using it*). Is there another time when you'd rather be using it? Why aren't you using it at this time?
- ➔ Do you use the Internet anywhere else? Is your home Internet use different from (work, school, café)? **Why** do you use the Internet at home? (*More time? More quiet?*).
- ➔ Are you ever **interrupted** when you use the Internet at home? (Who interrupts and why? Or why not – is the time of day or good scheduling?)
- ➔ Tell me about **how you use** the Internet. What do you do online? (email, searches, finances) (Probe for culture/leisure activities: e.g., reading newspapers, zines, or online comics; looking up information about cultural activities such as books, movies, fine arts, sports; buying tickets for events; maintaining their own website)

[Let's talk more about how you use the Internet from home specifically.]

Communication:

- ➔ Who do you communicate with the **most** on the Internet from home? How do you do it – email or IM? Why (*instead of F2F or preference of one over another?*)
- ➔ What kinds of things are you talking about? How much time do spend online communicating?
- ➔ Do you ever email or IM the people in your home?
 - (If yes) How much **time** do you spend emailing/IMing them? Why might you email/IM them instead of talking to them face-to-face or by telephone? Or (if not) why do you think you don't email/IM them?
- ➔ Has the Internet made communicating with people easier or more difficult?

- ➔ [If they work at home]When you are working at home, whom do you usually contact for work? (*probe: clients, coworkers, partners, etc. Write down numbers for each category.*) Why? Can you give me an example?
- ➔ Who usually contact you for work, when you are working at home? Why? Can you give me an example?

Information Seeking:

- ➔ Tell me about the **kind of** information you look for online when you are at home (*Probe for seeking information about interests & hobbies—do they look up background info about bands/books/TV shows/sports teams/movie reviews? Do they look for information on live performances and events—gallery openings, concerts, etc.?*)
- ➔ How do you **go about searching** for information online? (*process – search engine*)
- ➔ How do **you like** the Internet as an information source? (*reliable or not, useful, trustworthy etc*)
- ➔ How did you look for this information **before** you had the Internet in your home?
- ➔ If something **came up** during the day, and you needed some information, what would you do? Would you go online? How would that work? (*maybe phone number, or info about illness, cultural event information, etc*)
- ➔ Have you ever accessed the Internet for **health** information (if not already discussed)? Where did you start – can you remember the story? Was it a general concern or a chronic condition? Did you forward this to anyone?
- ➔ Do you ever use the Internet to search for information about your ethnic heritage or to search for information about events relating to your country of origin? Can you tell me more about that? (*Where do they go? What kind of information do they look for? Are they reading news sites, or talking to people?*)
- ➔ Do you ever use the Internet to search for information about local organizations or services related to your religion or ethnic heritage? (*E.g., religious services, ethnic business associations, stores selling specialized goods such as halal meat*) (*Once again: Where do they go? What kind of information do they look for? Are they reading news sites, or talking to people?*)

Scheduling Internet Use among Household Members:

(*If person has other people in the household ie: roommates, family and computer is shared*)

- ➔ Is there one person in your home who uses the Internet **more than others** when you are home? Why is that? (Who uses it the most? Why?)
- ➔ Do you feel that anyone's Internet use in your home is **more important** than the others? Why is that? (*school, work*)
- ➔ (if they have one internet access point) What would happen if two people needed to go online at the same time? How would that be **worked out**? Does this happen often?
- ➔ Who makes the **decisions** about the Internet (how it's used or maintained etc) in your home? How come?
- ➔ What about **bookmarks** in the browser or Internet downloads? Does anyone take care of these?
- ➔ Do you personally have a **routine** set up for your Internet use? How is Internet use organized in your home? (*For example, a schedule*)
- ➔ **Who made** this schedule? Why did he/she do it and not someone else?

- Tell me about the ways (if any) having the Internet in your home **changed** your typical daily routine? (*made easier, added work, able to do more etc*)

Internet and Family:

(*If person is living with other family members*)

- Do you find you spend most of your **time on the Internet** by yourself or with other people in your home? How come?
- Are you online at the same time as members of your family who live outside of the home?
- How much time do **you spend with people** in your home using the Internet together/at the same time? Would you like to spend more? How come?
- What kinds of things are you **doing online together**? (*school, recreation/leisure or communicating with friends and family?*). How is that working for everyone?
- Do you think that having the Internet in your home has **affected the relationships** you have with people in your home in any way? (*brought closer, or drove farther apart*)
- How has the Internet affected the time you spend with your spouse/partner **doing other things** at home like watching TV or playing games? (*less time, more time, same*). What about going out socially?
- Do you do this **less now** than before you had the Internet?
- What about your children? How has having the Internet in your home affected the time you **spend with your children** doing other things at home? (*less time, more time, same*).
- How has having the Internet in your home **affected any of your relationships** outside the household with family, friends, neighbours, and co-workers? (*communicate with them more, see them less*)
- Can you think of a time when using the Internet (you personally) may have **interfered** with your family life?
- What are some of the **positive** ways that the Internet has affected your home? (*time saving, info source*)
- What are some of the **negative** ways that the Internet has affected your home? (*takes up time, difficult to use*)
- Can you tell me about a time when there may have been some **disagreements** or arguments between people in your home because of the Internet? What happened? How was it resolved? OR why do you think there haven't been any issues or problems?

Household Roles:

- If you could spend **more time** on the Internet when you are at home, would you? (*If so*)
What kinds of things keep you from spending more time on the Internet?
- How has the Internet affected the time you spend on **other jobs around the house**? (*such as, housework, childcare, and meal preparation*)?
- Has the Internet affected your household responsibilities? (*probe: has it added to your workload or changed the role, if so in what way?*)
- Aside from your personal use of the Internet, in what ways do you **use the Internet for** your **home** or household maintenance? (*groceries, finances etc*)?

Children:

(*If participant has a child/ren*)

[Let's talk about your children and the Internet.]

- ➔ How often do your **children use** the Internet when they are at home? (If a lot) Does this cause any problems for you or other people in your home?
- ➔ What kinds of things are they **doing online**?
- ➔ Tell me about **what's going on** with others in the home when your child is online. Are you in the same room; are you watching or helping or doing something else? Why do you do this?
- ➔ What **concerns** do you have about your children's Internet use? What is your major concern and why? (*porn, stalkers etc*). How do you deal with this?
- ➔ How often do your children come home with **schoolwork** that involves Internet use?
- ➔ Who **is responsible** for helping your children with their Internet schoolwork?
- ➔ How **much time** does this usually involve? Is this more or less time spent for you before to the Internet homework?

[INTERVIEWER MARK TIME ON THE RECORDING _____:_____]

Section Two: Name Generator

Mark Colors: (you should use the same colors for the stickies and for the lines)

Very Close: _____

Somewhat Close: _____

1. Familiarization

Let's talk about your friends and family who **live outside** the household. In the survey, we asked you about people who are Very Close and Somewhat Close to you (*present card 1-RED*). Just to remind you:

VERY CLOSE:

- discuss important matters with, or
- regularly keep in touch with, or
- there for you if you need help.

SOMEWHAT CLOSE:

- More than just casual acquaintances, but not 'very close'.

This is our **Name Template** [*Present the template*]. On each of the little strips, you will be able to **write down the names** of people you know.

2. Name Generating

Okay, now think of people who fit that "Very Close" description. Please **write down** all the **names** of the people you feel **very close**. Please do not include people who you live with.

Now think of people who fit the "Somewhat Close" description. Please write down all the **names** of the people you feel **somewhat** close.

INSTRUCTIONS: Once they are done, refresh their memory using the YELLOW card. They should look over each category.

Now, just to make sure that we got all of the people that you are somewhat close to and very close to, on the YELLOW card is a **list of the different ways** you might know people. Have a look at this card and see if it refreshes your memory.

NOTE: this might or might not generate additional names.

NOTE: A couple would have two strips – one for each person. Handle separately.

NOTE: check for duplicate names (get last initial to differentiate).

3. Roles – Multiplexity

INSTRUCTIONS: Respondents should write one or more numbers next to each name. The number corresponds to the numbers on the YELLOW card.

Now that we have some names, we would like to know the **different ways** in which you **know these people**. Next to the names on the strips, please write down the **number** corresponding to the ways you know this person.

If you know the person in more than one way, please **write down all** the corresponding numbers. For example, if you work with your immediate family, write 1 for family and 4 for currently work with.

NOTE: Spouses outside house are “other”; Grandparents are extended family.

4. Plotting Networks

INSTRUCTIONS: They will build a social network in two stages:

- 1. Laying out the stickies*
- 2. Drawing the lines. Read out the following instructions to help them lay out the stickies.*

Here is the sheet where we will **draw your social network**. It will look something like this when it is done. [*show them the example sheet*]

1. Start with the very close names
2. Put the people who know **each other closer** together, and
3. Put the people who you feel **closest to nearest** to you

NOTE: None of the little stickies should overlap.

NOTE: Sticky part on the line.

4. Now let's add the somewhat close names
5. Try to **use all the circles**, you can rearrange the names until you are happy with it

5. Network connectivity

INSTRUCTIONS: This is the second stage, and it's tricky so take your time. They will draw lines between people who know each other, and do this IN SEQUENCE.

*NOTE: Very and somewhat close pen colors should match very and somewhat close sticky colors. ***

- **Step 1: Circle groups** of people who are **very close**. (*NOTE: This will probably be a group of immediate family*)
- **Step 2: Draw lines** between pairs of people who are **very close**
- **Step 3: Circle groups** of people who are at least **somewhat close**. This circle can include people who are either very close (since the line is already drawn) or somewhat close. (*NOTE: This will probably be a group of friends or workmates*)
- **Step 4: Draw lines** between pairs of people who are **somewhat close**

NOTE: People may want to draw a line from a group (or circle) to a name outside the circle this is okay but it should be clearly drawn.

6. Reasons for closeness

So now we know what your social network looks like. We can move on to **find out a little** about these people.

First I'd like to know a little about what very and somewhat close **means to you**.

INSTRUCTIONS: Use card 1 (RED) again. We will be looking for the person with the lowest "rank number" in each of the four rings (total four people). Do the following for each person:

1. You said that this person was [Very/Somewhat] Close. Looking again at the three reasons for closeness **which of them does this person fill?** It is okay if they fit all of the reasons, just one, or none.
2. Are there **any other reasons** that you had for deciding that this person is [Very/Somewhat] close which we didn't include?

NOTE: If they only have people in three rings, get the second-lowest person from the centre ring.

7. Network members in detail and frequency of media usage

For this section, we are going to do a little **mini survey** on some of the people in your social network. We will be talking about how you communicate with them. [*hand them the sheet*] – if some of these don't apply, just skip that part. I'll be doing this with you in case you have any questions. (*NOTE: Instant Messaging won't apply to most people*)

INSTRUCTIONS: For this section, you will sample people from the network based on their rank number (regardless of whether they are the lowest “somewhat” or “very” close people)

Step 1: Take the three lowest numbers from the centre circle.

- *Mark a * on those names.*

Step 2: “working your way out of the rings”

- *Start with the inside ring. Do the following until you have 12 people (so that's 15 in total) or until you run out of people.*
 - Find the person with the lowest number that doesn't have a **
 - We shouldn't get two people from a couple. So if a person's partner is already got a * then get the next lowest person. Ask the respondent.*
 - Mark a * on that person.*
 - Move out to the next ring (if you are at the outermost ring, go back to the inner ring)*
 - Go back to 'i'*

*When you are done, complete the mini survey with the people who have *'s next to their names.*

NOTE: probes for the out-loud questions in the mini-survey:

- *Job: [includes homemaker]*
- *Ethnicity: [if they say Canadian, prompt where the family is originally from]*
- *Where does he/she live? If in the Greater Toronto Area, what's the intersection; otherwise, what's the city [If GTA, try to get as much as detailed information here; e.g. West / East]*
- *Where do you usually see him/her? If in the Greater Toronto Area, what's the intersection; otherwise, what's the city [If GTA, try to get as much as detailed information here; e.g. West / East]*

8. Specific Social Event Questions.

This next section is about socializing with other people. I will first select - with your help - some members of your social network, and then I will ask some questions about the last time you socialized with them

INSTRUCTIONS: Once again, we have an iterative sampling procedure. This time, instead of 15 people, we are looking for 6 social events

“Working your way out of the rings” - You want six people in total.

Start in the inner ring:

- *Get the * person from that ring that they socialize with most often in the Greater Toronto area. Circle that name.*
- *Go out to the next ring (if you are on the outermost ring, go back to the inner ring). Repeat until you get 6.*

*NOTE: If they don't socialize in Toronto with any * people in that ring, move out to the next ring and continue. If you have run out of * people but you still have less than 6 events, start in the inner ring and use the non-* people that they socialize with most often in Toronto and move outwards until you have 6 events.*

INSTRUCTIONS After the sampling procedure, ask the following social event questions with each person whose name is circled.

NOTE: social meeting defined as activities that involve mainly social interaction (e.g. visiting, hosting, going to a restaurant or pub) rather than attending an event (e.g. sport event, cinema).

Can you tell me a little about the last time you socialized with [him/her] in TORONTO?
[prompt card 4 – BLUE]

8.1. About the specific activity

- **What:** What did you do when you got together? [*places where people socialize together - hosting / visiting / restaurant or pub RATHER THAN attending same event such as movies, concerts*]
- **When:** What time of day was it? [*morning, noon, afternoon, evening, night or approx. time*]
 - Was it a weekday or a weekend? [*day of the week: important to differentiate between Fridays and other weekdays*]
 - About how much time did you spend together? [*length of the meeting*]
- **Where:** Where did you go? / Where in Toronto was this, just the main intersection is fine [*preferably the main intersection, including west/east if applicable; if not remember, the best possible detail*]
- **Who:** Was anyone else there, not just the people you talked about a minute ago? [*distinguish between people who were mentioned in their personal network and others*]
- **Mode:** How did you meet with [person 1]: did you take the TTC, car, walk?
- **Planning the activity:**
 - Did you plan it or were you invited?
 - How was it planned? [*probe: f2f, email, tel/on going/routine*]
 - How far in advance was it planned? [*spontaneous; same day, week, month, year; pre-set activity/regular commitment*]

8.2. About the activity in general

- **Frequency:** Have you done this activity in a previous occasion? [*If previous answer YES*] How often do you do [this] with [person 1]?
- **Place:** Do you normally meet at the same place, or different places? Why do go to this place(s)? [*close to work / home / other places, I / We like this place, cheap, it has been seen by someone else*]
- **Day / Time:** Is it usually at the same time? Is it at the same day of the week? Why do you meet at this time(s) / day(s)? [*pre-set time / day, commitment, depends on availability of participants*]

9. Social Support Questions

[prompt card 5 – PURPLE]

Now, I would like to ask you some questions about **information and advice**. (*No sample on this one, just whoever they say in their network*)

Who has given you help with the following:

- Advice on important matters
- Advice about new job opportunities
- Care for a serious health condition
- Help looking for information about a health issue
- Help with home renovations
- Advice on using a personal computer
- Who do you just talk about the day with?

10. General Health

When we talked about social support, some health matters were mentioned. I'd like to follow up on those now. When I say health, I am talking about both physical and mental health issues

- Do you think of yourself as a **healthy person**?
- On a scale from **1-10**, where ten is “excellent health”, how would you rate your own health?(*Looking for number and perhaps more information*)
- (*In the event the answer is 10*) **How** do you manage to do that?
- (*In the event the answer is less than 10*)
 - What would **need to change** to give yourself a 10 rating? (*get a list of reasons*)
 - Are you doing anything to **make those changes**? (*probe for information, clinics, social support*)
 - (*If the list is long*) What do you consider to be **your health priority**?
- Would you describe any of your health issues **chronic or long-term**?
If yes:
 - **Who** do you go to for information, help or support for this condition?

- Are they in your **social network**?
- When you have an **acute or unexpected health** issue who do you go to for information, help, or support?
- Are they in your **social network**?
- Can you tell me about the **last time** you **looked** for health **information or support** for any of the things you might have mentioned?
 - Where did you **start** / How did you begin that **process**?
(Interested in source of information, people that you talk to, a variety of places that you went, what is the sequence of the events, you want all of the details and the information, rich data.
Use all of your coaxing skills and your “and then’s” and active listening.)
 - Have you ever **wanted to talk** to someone who has a similar health matter?
 - Did you connect with them **online**?

If yes:

- Have you put them in your social **network**?
- How would you **describe your relationship** or connection with that person?
- Where did you first meet them?
- Please tell me about the **experience of finding** them? [probes: process, steps, emotional impact]
- What **kinds of support** did you receive? (probes: information, or emotional support)
- How **successful** was your experience? (Probe for advantages and disadvantages of each source of support that has been mentioned.)
- Are there people **who come to you** for help and advice for health matters?

If no, you can go to next section.

If Yes:

- Are they in your social **network**?

If No:

- **Who** are they? Describe the relationship (*family, friends, online only*)

If Yes (and for the no’s)

- What **kinds of support** did you provide (*information, advice, support*)
- How was your **experience**? (*Probe for advantages and disadvantages if mention different sources*)

11. Leisure Time

Next I’d like to talk to more about the **things you do** in your free time, and **who you talk to** about those activities. *Get out cue cards arranged by thematic areas: television/film, music, fine art, performing arts, sport & games, ethnic & national heritage, reading & writing.*

I have **eight cards** here. On the front of each card is a topic that some people are interested in. (*Lay out the cards one by one, topic area face up. As you lay down each card, read the topic out loud.*)

- Do any of these topics **interest** you? Which topic is **most interesting to you**? Then which one? (*And so on to least interesting*) (*Make an ordered/ranked pile of the cards reflecting the participant's interest.*)
- Let's go through these now, starting with the one you're the most interested in: What **kinds of things** or activities do you do? **How often**? (*Try to narrow scope of interest. Use probing skills about decision making and starting point.*)

Let's take a closer look at the first two areas you said you were interested in:

- **How you decide** what to do/listen to/make/read/watch/buy?
 - Where you get **information** and **recommendations** for (*topic1*)?
 - How about (*topic2*)? How do you **decide** what to do?
 - Where do you get **information and recommendations** about (*topic 2*)?
1. Do you ever **get suggestions** or **recommendations** about (*topic*) from other people? (*if no, go onto #2*)
 - Are they on the list we created earlier? **Who**?
 - **[If not]** Can you tell me a bit about them? – relationship descriptors
 - **Do you** typically **ask** them for recommendations, or **do they** usually **volunteer** recommendations?
 - How often do you make suggestions? (**often**, occasionally?)
 - How often do you **take their suggestions**?
 - Do you ever get suggestions from them about other things you're interested in?
 - **How** do you usually talk about (*topic*)? (F2F, phone, email, IM, etc.)
 - Is it the same people all the time, or to different people?
 - Are they on the list we made earlier?
 - Have you ever arranged to meet any of these people?
 - Do you ever post questions online anywhere?
 - Do you ever show people things that you've made or announce your website/photo albums/weblog, etc.?
 2. Do you ever **make suggestions** or recommendations about (*topic*) to others? (*if no, go onto #3*)
 - Are they on the list we created earlier? **Who**?
 - **[If not]** Can you tell me a bit about them? – relationship descriptors
 - How often do you make suggestions? (never, occasionally?)
 - **How** do you usually talk about these things? (F2F, phone, email, IM, etc.)
 - Is it the same people all the time, or to different people?
 - Are they on the list we made earlier?
 - Have you ever arranged to meet any of these people?
 - Do you ever post questions online anywhere?

- Do you ever show people things that you've made or announce your website/photo albums/weblog, etc.?

12. Observation Guidelines

(if participant has internet access – if not, go to health observations)

12.1. General Observations

Now, let's change the pace a little. Let's take these cards and you can **show me how** you use your computer and what you do on the Internet. *(if more than one computer)* Which computer do you usually access the Internet from? Can I take a picture of it? *(Take a photograph of the computer/internet set-up – Remember to bring recorder with you!)*

12.2. Leisure Observations

Ok, we still have our cards *(lay them down again)*. Do you use the internet for the two most interesting topics you chose before? *(if not chose another they do use internet for.)*

1. Do you ever use the Internet to get information or recommendations about *(topic)*? *(if no go to Observation)*

[If yes] What do you do? (Web sites – which ones? E-mail? IRC?)

- What **kinds of information** do you typically look for? *(Background/bio? Concert dates? Ticket info? Reviews? Samples? Recommendations?)*
- Do you **trust** recommendations and reviews that you **read online** more or less than recommendations and reviews that you **receive from people** you know? Why?
- Do you ever **talk about** recommendations and reviews you read online with other people? How does that influence what you decide to do/listen to/make/read/watch/buy?

I'd like you to show me how you use the Internet in relation to these two cards. Can you show me what you do when you go online for/about *(topic)*? *(Enter name of activity/category and appropriate verb. Be sure to ask the interviewee to talk out loud.)*

(Questions or things to cover in the observations – can use this as probes if necessary)

1. **Getting There:**

- **How** are you getting to where you need to go? *(Process of finding sites: search engines, memory triggers, bookmarks, links in email, links on web pages, etc. NOT user interface material and issues.)*
- How did you first discover this site *(Search engine/recommended by someone they know—who?/linked to it from another site/saw the it in a newspaper/magazine/on TV, etc.)*

2. **The Site:** Is this somewhere you **go regularly**?

- How often do you visit here?

- What do you like about this place/activity? Is there anything you don't like about this place/activity?

3. Once at the Site: What are you doing once you get there?

- For example: Seeking information about the topic? What kinds of information? (*E.g. television spoilers, recommendations about camera filters, music samples, performance times and locations.*)
- How do you **use** this information? (*Make purchases based on online recommendations? go to ethnic stores they read about online?*)
- Are you doing anything other than reading/information seeking? (*Posting to forums, asking or answering questions, downloading music, putting up blog entries, playing games, shopping, posting photos, buying tickets, etc.*)

Ok, let's talk about **the second** area/activity/topic (*repeat above for second card/activity/topic*)

12.3 Health Observations

Thank you for showing me how you use the Internet for your leisure activities. Now we are going to look at something a little different. I am curious about how you get health information and how you share that information with others.

Here are some more **cards** for you to look at about Health. (*Lay out and read five Health Cue Cards: Lifestyle, Public Health, Chronic/long term health conditions, acute / emergency health conditions, Mental Health issues*)

Think about health issues, either ones we have already talked about, or ones that you have recently looked for information about using the Internet.

(If they do not use the Internet, ask them why not and where else they would go for information about Health issues.)

- Which **category** does the issue fit into? (*They can pick two different categories/issues.*)
- Can you show me **how you look** for information about (this health issue)?
Things to make note of and ask about:
 - Where do they start on the Internet?
 - Do they go to that site regularly?
 - How do they decide which site to go to?
 - What do they like about the site?
 - Do they ever go to chat sites, or group sites?
 - When looking for information do they search, read complete sites or go to the FAQ sections (if applicable)
 - Once you have found what you are looking for, do you go for a second opinion?
 - If so, where (*another site, a medical professional*)

- Do you **ever share** the information that you find? With who? How?
Things to make note of and ask about:
 - Are you using e-mail only to ask people questions?
 - Do you post questions to web chats?
 - Is this information for them or for a “tie”?

Conclusion

That concludes our interview with you today. Do you have any other comments or questions?

Thanks so much for taking the time to talk to us.

Comments: _____

- _____
- _____
- _____
- _____

Interviewer Notes:

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Appendix H: Interview Coding Tree

Layer One	Layer Two	Layer Three	Layer Four
The Household	→ Members		
	→ Layout		
	→ Routine		
	→ Household Chores	→ Who does what	
	→ Decision making	→ Who decides	
	→ Leisure Time	→ Type of activities	
	→ Social Visits	→ Type of visits	
Working at Home	→ Type of work		
	→ Routine		
	→ Problems	→ Positive	
	→ Impact	→ Negative	
	→ Technology	→ Types of tech	
	→ Communication	→ Who & How	
Internet in Home	→ Reasons	→ Work, school, children	
	→ Finances		
	→ Feelings	→ Positive	
Location of Internet	→ Where	→ Negative	
	→ Reason	→ Public/Private	
	→ Problems		
Personal Internet Use	→ Use	→ Positive	
	→ Hours	→ Negative	
	→ Time of Access	→ Communication	→ Who & How
	→ Internet use elsewhere	→ Information	→ Type of information
	→ Interruptions		
Communication		→ Children/partner	
	→ Who	→ Friends	→ How
	→ How	→ Family	→ Reasons for communication
	→ Effects	→ Positive	
	→ Impact	→ Negative	
	→ With household members	→ Partner	
Information Seeking	→ Type of Information	→ Children	
	→ How searched	→ Personal, household, work, school	
	→ Pre Internet searches		
Scheduling home internet use	→ How		
	→ Decision making	→ Who decides	
	→ Personalization	→ Conflicts	
	→ Changes		
Internet and Family	→ Time on Internet with family		
	→ Effects on relationships	→ Positive	
Household Roles		→ Negative	
	→ How Internet Used	→ Domestic uses	
	→ Effects		
Children	→ Time Spent	→ Positive	
		→ Negative	
Children	→ Use with children		
	→ Children's activities		
	→ Concerns		

Appendix I: Log of Digital Photos

ID	Photo Files	Kitchen	Family Rm	Office / study	Living Rm	Master bdm	Children's bdm	Other	Total	DT/LT	Notes
174	SURVEY	0	0	1	0	0	0	0	1		Lots of items in area but organized, looks like home business center. Stacks of papers on desk, calculator, highlighter, small toy on top of monitor, CDs, etc. on shelves, mug/card/photo on top desk, name plate, file holder; mailbox cubby shelves w/ shipping/comp materials, table w/ fax/printer/paper holder, stack of mail, crates of random items beneath/around table
	CL_174_09Feb05a			x						D1	
	CL_174_09Feb05b			x						D1	
	CL_174_09Feb05c			x						D1	
310	SURVEY	0	0	0	1	0	0	0	1		Narrow corner desk fits only monitor, tissue box, lots of plants in background, two photos, mug of pens; very small crowded family room - dark furniture, comp chair looks from breakfast dining table, very green room
	CL_310_07MAR05a				x					D1	
	CL_310_07MAR05b				x					D1	

This page is intentionally left blank.