RISING ABOVE A CRISIS: RESILIENCE PROCESSES AND COMMUNITY WELL-BEING

by

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Abstract

Background

The closure of the North Atlantic cod fishery in 1992 has had devastating economic, social and health impacts on coastal communities in Newfoundland and Labrador. However, considerable variability in adaptation has been noted between communities that were formally dependant on the fishery.

Aim

This thesis builds on previous research by exploring the community-level social and economic processes that contribute to the variability in adaptation measured through an expansive conceptualization of community well-being.

Method

Two communities differing in employment recovery during the 1990s were selected for multi-method case studies. Quantitative and qualitative data on community well-being, social processes (social capital), and economic processes (local economic development) were integrated into the analysis.

Results

Ratings of most community well-being dimensions were generally positive in both communities. However, Dorytown residents reported less alcohol abuse, less crime, greater ability to be involved in decision-making, greater satisfaction with community characteristics such as greenery and parks, water quality and services from the local council. Residents of Dorytown were also more hopeful for the future, and perceived greater employment availability in the region. Some mental and physical health

indicators were poorer for both communities than for the Province, with the exception of self-rated health and heavy alcohol consumption. Dorytown had lower hospitalization rates than Bigcove, and less moderate and heavy drinking. Community well-being findings for Bigcove were more consistent with documented effects of economic decline.

In terms of economic and social processes, employment in Bigcove had been more dependent on the volatile fishery whereas Dorytown community groups planned and executed an economic development strategy using federal and provincial programming dollars, volunteered labour from the community, and natural resources within the community. Residents in both communities expressed concerns with employment security in their towns. Interviews suggested that all forms of social capital (bonding, bridging and linking) were associated with greater development of community-controlled economic opportunities and positive social outcomes (youth engagement, public safety) for Dorytown. Other factors such as leadership, human capital (skills and knowledge), and community enabling government policies played a substantial role in outcomes for Dorytown.

Conclusion

These findings provide some insight as to the community-level processes that underlie certain dimensions of community well-being and demonstrate the benefits of a mixed-methods approach to understanding it. Policy implications include skill-building supports for community development volunteers, and aspiring or existing entrepreneurs, so that they are better equipped to engage with government or other funding bodies, continued support for community development funding programs, and policies that support economic diversification.

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List of Abbreviations and Symbols

CWBQ	Community V	Well-being	Questionnaire
	-		(

CED Community Economic Development

LED Local Economic Development

NEF New Economics Foundation

SOC Sense of Community

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Chapter 1: Background and Aims of the Study

What do we know about the impact of the cod fishery closure on coastal Newfoundland and Labrador communities over a decade later and why conduct another study? This chapter provides some explanation and context for the decline and eventual closure of the cod fishery and summarizes known impacts, identifying certain gaps in our understanding of the nature of community adjustment, resilience and associated outcomes. From this review and a review of the relevant literature in Chapter 2, the general goals of the study are developed. These goals are further refined into an analytical framework and three specific research questions presented in Chapter 3.

1.1 Contextual Background

1.1.1 Communities and the Fishing Industry

The province of Newfoundland and Labrador is the most easterly province of Canada with a northern portion (Labrador) adjacent to Quebec, and an island portion that extends further east, into the Atlantic Ocean. This vast province is characterized by one of the lowest population densities in Canada¹ (Murray et al., 2006). Historically, a large part of economic activity in the province has been the cod fishery and related work. Rural and coastal Newfoundlander and Labradorean communities dependent on it have experienced challenges to their survival resulting from seasonal variations in workload, the burden of large financial investments in equipment, unpredictable weather, fluctuating international markets, and changing government policies (Fowler, 2001; Mason, 2002).

¹ According to 2006 census data, it stands at 1.4 people per square kilometre, lower than that of Canada (3.5) and considerably lower than that of the other Atlantic provinces, which range from 10.2 (New Brunswick) to 23.9 (Prince Edward Island) (Statistics Canada, 2007)

Over the last two centuries, fishing capacity increased due to advances in technologies. First, long line fishing (long sets of baited lines set up from small boats or dories) was supplemented by the use of cod traps (boxed nets) in the 1860s. In the 1900s, bottom nets (trawls) pulled by larger steam driven boats were introduced, dramatically increasing cod landings. This development was followed by 'factory freezer' trawlers from foreign countries that contributed to an over-fishing of cod off the shores of the province.

Although Canada declared a 200 mile exclusion or economic zone to protect its fish in 1976, the decades-long effects of foreign over-fishing combined with domestic over-fishing contributed to a gradual depletion of the cod stocks (Bundy, 2001; Gomes, Haedrich & Villagarcia, 1994; Murray et al., 2006; Neis et al., 1999).

1.1.2 Moratorium and Crisis

On July 2, 1992, then Minister of Fisheries, John Crosbie announced a two year moratorium on the northern cod fishery; a termination of all cod harvesting² activity along Newfoundland's east coast (Hutching & Myers, 1994). The resulting widespread industry crisis impacted thousands of fishery workers and their families. An estimated 19,000 fishers and plant workers immediately lost their jobs; while a further 20,000 jobs were negatively affected (Economics and Statistics Branch, Government of Newfoundland and Labrador, 1997).

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² Though the moratorium banned cod harvesting, other species were being caught. There is some debate as to whether the continued fishing of other species affected dwindling cod stocks as well.

1.1.3 Government Adjustment Programs

The Government of Canada introduced the Northern Cod Adjustment and Recovery Program (NCARP) as an income support measure to lessen the immediate economic impact. The program was to continue until the spring of 1994. At the time of this announcement, stakeholders such as government scientists and managers were confident that this short-term measure would allow fishing to resume (Mason, 2002; Murray, et al., 2006; Ommer, 2007). However, in January of that year, it became apparent that the fish stocks were not recovering. An indefinite moratorium was declared for ground fisheries in the Atlantic and Quebec regions, affecting approximately 40,000 workers (Economics and Statistics Branch, Government of Newfoundland and Labrador, 1997). NCARP was replaced with The Atlantic Groundfish Strategy (TAGS), comprised of income support and active training for alternative employment both within and outside a future fishery, or in community development projects. Approximately 40,000 workers qualified for TAGS assistance, with 30,000 being from Newfoundland and Labrador, far exceeding the Federal government's 26,500 expected participants. Funding lasted until August 1998, which was earlier than the projected date of May 1999. The focus of TAGS was found to have shifted from reducing the number of fish harvesters by re-training them for other employment to that of income supplementation (Murray et al., 2006).

1.1.4 Impacts of the Fishery Decline and Cod Moratorium

In spite of the funding expended through government programming in income support, re-training and community development projects (e.g. \$1.9 billion in Newfoundland and Labrador through TAGS), communities were devastated by the loss of fishery-related

employment (Hamilton & Butler, 2001; Sider, 2003). Several research projects have documented some of the negative impacts sustained by communities and their residents.

In 1993, the Newfoundland and Labrador chapter of the Canadian Mental Health Association commissioned a qualitative study to learn about residents' experiences with the fishery collapse and potential mental health issues deriving from it. Through a participatory community research process, residents and community leaders took part in 46 family interviews and community members provided feedback on the findings during open forums. Participants reported increased stress, tobacco and alcohol use, weight gain and sleep disturbances. Participants also reported elevated family tension and heightened friction among community residents (CMHA, 1993). Although interesting, this study had several limitations. These limitations included: a) the solely qualitative nature of the study methods, b) its sample selection procedures, in that participants were from 20 communities which could have varied in demographic and other characteristics, and c) the project did not consider the role of various community characteristics such as demographics, economic diversity, or the distance from, and the availability of services In 1995, a cross-sectional survey of over 600 residents of 23 impacted communities was conducted to assess the impact of the fishery closure on psychological illness, stress and coping in the communities (Gien, 2000). It found that individuals who were unemployed as a result of the moratorium reported less satisfaction with their own life, their family life and themselves (described by the author as poorer mental health). Both employed and unemployed residents reported stress in their lives at the time. It was suggested that this ripple effect on employed individuals was due to several factors: the stress of keeping employment in a deteriorating economic environment (lost revenues impact on local

businesses); the impact on employed female spouses of unemployed men who not only had become the primary breadwinner but had to continue with household management duties; and the negative impact on the marital relationship. This study did not examine other physical health indicators or health behaviours, nor did it account for possible differences between communities in contextual variables such as extent of job loss, employment situation at the time or population changes. Resident perceptions of these variables and their general outlook could possibly have influenced the impact on health and well-being.

The Atlantic Health Promotion Research Centre (1999) sponsored an exploratory study of community resilience in two communities from Nova Scotia and one from Newfoundland that were affected by the ground-fish collapse of the early 1990s. The goal of the study was to explore factors of risk and protection, and outcomes (both positive and negative) for communities experiencing adversity. Results from 66 interviews and 18 focus groups suggested that economic disadvantage, communal apathy and anger, powerlessness and resentment, low education levels of displaced workers and geographic isolation were risk factors to the well-being of the communities. Suggested protective factors included social support, sense of community, community involvement in the form of volunteering and participation, positive coping mechanisms and collective problem solving. In terms of positive outcomes on a more individual level, participants reported satisfaction with physical health services and good physical health. Negative outcomes reported were emotional and behavioural health problems attributed to the economic and employment situation. In terms of community-level outcomes, failure to rally for problem solving was attributed to a lack of cooperation between community

organizations. However, residents identified some economic development and guarded optimism about the future as positive outcomes. Some of the study limitations included the use of qualitative methods alone. Like the CMHA study cited above, the research took place during 1995 to 1997, when income support and other programs for displaced fishery workers were delaying larger impacts that would follow.

Fowler's (2001) study examined impacts of the economic crisis on six communities using a variety of government data sources up to 1996, followed by qualitative interviews with residents of two communities (a healthy one and an unhealthy one, according to the government data sources). Administrative data pointed to an increase followed by a decrease in mortality among residents aged 75 years and above between 1991 and 1996 for six communities profiled. It was suggested that the initial increase in mortality may have been related, in part, to the decline in informal care supports caused by outmigration of younger generations. Due to short observation periods and limited available information, further research was recommended to improve our understanding of the economic crisis' impact on health. Crime data revealed increases in crimes against property, though some variability existed between communities. Further communitylevel data collection revealed a re-opening of the fishery in the healthier community, allowing residents to seasonally qualify for employment insurance benefits. In the unhealthy community, interviews suggested greater use of health services by residents since the moratorium and a loss of health-enhancing social supports to the elderly, once provided by relatives who had since migrated for employment.

In a related paper that examined the same data, Fowler and Etchegary (2008) concluded that economic hardship and resulting out-migration negatively influenced the extent of

social engagement or social capital in these communities that was critical for resilience.

Social capital was suggested to be necessary but not sufficient for the achievement of health outcomes in the examined communities.

As this project was being undertaken, data collection was being completed for the interdisciplinary research project Coasts Under Stress, that examined how ecological changes on the east and west coasts of Canada affected various dimensions of human life. Dolan et al. (2005) drew upon that project to discuss the effects of environmental, industrial, institutional and social restructuring on the biophysical environment, coastal communities and their residents. For the three areas examined on the west coast of Newfoundland, decades of overfishing and climate change were cited as causing industrial restructuring (downsizing of the fishery and changes in species harvested), which combined with policies directed at individuals rather than communities, negatively impacted communities and their residents. The authors cited changes in fish processing and harvesting which led to less employment income, decreased ability to access Employment Insurance, skewed wealth distribution, and increased occupational health risks. These changes resulted in social restructuring, including changing household dynamics for small boat fisheries (more unpaid work taken on by the women in the family), greater outmigration which changed the age profile of the industry workers, greater dependency on transfer incomes for those who stayed behind, decreased recruitment of youth into the fishery, decreased informal care networks in the community for seniors, and increased difficulty of sustaining civic institutions. The weakening of family ties caused by outmigration was reported to have particularly negative psychological impacts on older generations who stayed behind.

According to Ommer (2007), the Coasts Under Stress project revealed that the coastal restructuring (i.e. environmental, industrial, institutional and social changes) that occurred leading up to, and since the cod moratorium and economic uncertainty caused by it took a toll on population health as evidenced by increased incidence of hospitalization due to circulatory disease and mental disorders. Community health impacts included perceived lack of work and services for all three geographical areas studied. However, levels of satisfaction with supports and services varied with each area, arguably due to associated unique circumstances (e.g. one area was a regional centre for services and another was considerably more isolated and suffered greater out-migration of youth). Many residents in all three areas perceived problems with drugs (over 60%) and alcohol (over 72%) in their communities. With respect to personal health, 43% reported their health as very good or excellent (compared to the Canadian average of 61%). While these residents reported less stress than the Canadian average, the principal reported sources of stress were employment insecurity, followed by (unstable/declining) finances. It was found that communities in the area that had experienced the most recent and severe disruptions due to economic restructuring had poorer ratings in physical and psychological health, as well as increased perceived problems with drug abuse and family violence. Coastal restructuring and the associated changes in employment availability were found to have had a positive impact on levels of educational achievement in the studied communities (Ommer, 2007).

Finally, the Decade of Change³ project (MacDonald et al., 2009; Murray et al., 2006) examined health and social well-being statistics for communities varying in fishery dependency at the time of the cod fishery closure. Four fishery dependency categories were created based on varying degrees of post-moratorium income transfers received by the towns. This study added to previous research by utilizing community well-being data from three reference points; one before the cod moratorium (1991) and two since (1996 and 2001). Communities that were more fishery-dependent were found to have sustained greater losses in population in 1996 and 2001, with losses particularly focused among men and young people. Measures of economic well-being⁴, community self-reliance⁵ and administrative health⁶ were negatively associated with a community's fishery dependency in 1996, while measures of population ageing and self-reported health status were more negatively related to a community's fishery dependency in 2001. However, in both years, it was possible to predict membership of the non-fishing dependent communities better than membership of the fishing communities. This suggested considerable variability within the fishing communities in terms of the impacts explored (socio-economic well-being and health), and was identified by the authors as worthy of further investigation.

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³ The Decade of Change Research Team was a collaboration of faculty from the Division of Community Health at Memorial University of Newfoundland, and the Newfoundland and Labrador Centre for Health Information. The project title was "A Decade of Change: An Investigation into the Health and Social Wellness of Newfoundland and Labrador Communities Pre and Post Moratorium. Principal Investigator: Michael Murray.

⁴ Economic well-being measures included median family income, employment (percentage of the population aged 15+ years), and percentage of the population in receipt of social assistance.

⁵ Community self-reliance measures included total census population aged 65+, self-reliance ratio (income resulting from market activities rather than government transfers), educational attainment (% of population aged 15+ years with less than grade 9), and percentage of population change from 1991-1996.

⁶ Administrative health indicators included crude rate of total acute care hospitalizations and crude death rate.

Another goal of the Decade of Change study (MacDonald et al., 2009; Murray et al., 2006) was to better understand those fishing dependent communities that were most resilient, or rebounded after their initial decline. Five socio-economic measures were combined to form an index of community resilience or socio-economic recovery in this study, viz., employment, self-reliance, income, social assistance dependency and population. The study found that the best predictor of socio-economic recovery between 1996 and 2001 was a variable called economic well-being 1996, comprised of median family income, percentage of population employed and percentage of population in receipt of social assistance (Murray et al., 1996). The second best predictor of socioeconomic recovery was administrative health status in 1996, comprised of crude rates of total acute care hospitalizations and crude mortality rates. The communities that tended to recover had a more diverse fishing economy and were not solely dependent on the northern cod fishery. These communities were also less isolated from a larger regional centre. The authors identified a need to expand the study of these communities beyond the use of administrative and survey data, and to examine more broadly their economic context, to include, for example, other industries. The study also found that improvements in health were associated with socio-economic resilience as age standardized hospitalization rates remained higher in fishing dependent communities, a product of poorer health (as indicated by higher BMI) and greater barriers to accessing health care (MacDonald et al., 2009; Murray et al., 2006). However, the measures of community health and well-being used were limited.

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⁷ The Socio-Economic Recovery Index was comprised of percent change in employment, self-reliance, income, social assistance dependency and population.

These research projects have begun to create a portrait of community reactions to the decline of the fishery in Newfoundland and Labrador. However, a need for further investigation into wider community health impacts of the moratorium was identified (Fowler, 2008; Gien, 2000; MacDonald et al., 2009; Murray et al., 2006). The Coasts Under Stress study began some of this work. The aim of the present study is to build on and extend the literature on the adjustment of relatively remote rural communities to the loss of an economic base by providing an up-to-date analysis of what has happened since the turn of the twenty-first century. Both the Decade of Change and Coasts Under Stress research findings revealed considerable variability between the fishery-dependent communities regarding socio-economic recovery and changes in health following the moratorium (MacDonald et al., 2009; Murray et al., 2006; Ommer, 2007). It is felt that to enhance our understanding of the variability in well-being between communities that once depended on the fishery, there is a need for a more in-depth exploration of community processes involved in adaptation to the new economic reality in outport Newfoundland.

1.2 General Aims of the Research Project

The current research project aimed to address research gaps by:

- Examining the impact on rural fishing communities that had experienced an economic crisis using an expansive conceptualization of community well-being.
- 2) Exploring in detail the social and economic adjustment/resilience processes associated with changes in community well-being in these rural communities.

In summary, previous research on the impact of the cod moratorium suggests that community-level social and economic factors contribute to well-being outcomes (Fowler,

2001; Fowler and Etchegary, 2008; Ommer, 2007). Given that past research has indicated the importance of various economic factors on subsequent community health and economic recovery, measured using employment-related government statistics (Murray et al., 2006; Ommer, 2007), there is a need to explore in more detail the character of community-level economic processes particularly those that create employment opportunities. This research project has done so through a case study approach, comparing well-being and community-level processes in a community that has been more successful in employment recovery, with one that has been less so (See Chapters 3 for a description of the selection criteria and Chapter 4 for the community selection data).

In the next chapter, literature will be reviewed on the suggested effect of an economic crisis on community well-being, and the ways in which social and economic resilience processes can mediate the relationship. The review will form the basis of a conceptual model of community resilience (presented at the beginning of Chapter 3). More specific research questions will develop from that resilience model and will guide the research design, data collection and analysis of the project.

Overview of Chapter 1

- Communities in rural Newfoundland and Labrador have historically been challenged by uncertainty in their main economic base, the fishery.
- The most significant recent challenge has been the closure of the cod fishery announced in 1992. Though many residents clung to hopes of a recovery of stocks, a significant fishery did not return, leading to out-migration of youth, and evidence of various negative health and well-being effects.

• Some research has begun to offer an understanding of health and well-being impacts of this economic crisis. However, these can be expanded upon in terms of timeframe and methods for data collection or themes explored in order to better understand the relationship between social and economic adjustment processes and variability in community well-being between once fishing-dependent communities.

Chapter 2: Literature Review

The aim of this chapter is to clarify what is meant by community well-being and to consider the character of social and economic processes that could mediate well-being outcomes. The literature presented in this chapter is not limited to rural studies due to the possibility that the phenomenon being observed in non-rural areas could apply to rural areas. When evidence from rural or coastal areas was available, especially areas of rural Newfoundland and Labrador, it was highlighted as particularly important for this study.

The first section of the literature review begins by examining the different definitions of community well-being, and how it is described in both research and policy contexts.

Since community well-being is a relatively new concept in the literature, 8 a broad variety of community well-being models were considered. The section proceeds to describe known effects of economic crises on various dimensions of community well-being.

The second section introduces the concept of resilience as a description of the way in which communities can actively respond to a crisis. More particularly, it identifies various social and economic resilience processes that are potentially capable of mediating well-being outcomes in communities affected by an economic crisis. The concept of Local Economic Development (LED) and its various forms is introduced and it is proposed as a key economic resilience process. Also, the concept of social capital is described and it is proposed that it is a social resilience process. The chapter reviews

⁸ Searches for community well-being theory revealed that very few models existed prior to 2000.

evidence suggesting that both processes can mediate crisis effects on well-being. Finally, the relationship between social capital and LED is discussed.

The meaning of community

The word "community" can be used in several ways. Communities of interest reflect groups of people with common hobbies or causes. One can also refer to occupational communities (e.g. the fish harvesting community). However, for the purposes of this study, community is a synonym for place, somewhere that people identify as a shared site for residence.

2.1 Conceptualizing Community Well-being

Scholars and policy makers have increasingly recognized the importance of studying well-being at the community level where individual factors interact with political, social, economic and environmental ones (Christakopoulou, Dawson & Gari, 2001; Hancock, Labonté & Edwards, 1999; Kusel & Fortmann, 1991; Labonté, 1994; Ommer, 2007; Ribova, 2000). This more comprehensive view of well-being is consistent with the World Health Organization's (1986) definition of health, taken from the Ottawa Charter for Health Promotion (p.1):

To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. (WHO, 1986)

This section begins with a review of community well-being as defined in academic publications followed by a description of its use by not-for-profit associations and policy makers. The first models presented derive from the field of population health/epidemiology. The review extends to conceptualizations of well-being developed by contributors from the fields of sociology, political science, psychology and economics.

Drawing on the determinants of health approach (Health Canada, 1994), Ron Labonté (1991) conceptualized healthy and sustainable communities as possessing the following key characteristics:

- · economies that allow residents secure, liveable income and employment,
- conviviality (a striving toward consensus while accepting the reality of conflict),
- sustainable economic development planning which takes into account the natural resource limitations,
- an equitable social environment (access to housing, food, income, employment, recreation and other things), and
- liveable built environments (infrastructure such as roads and water systems, etc.).

Labonté stated that local governments can strive toward these goals through setting policy and legislation, and through education, partnerships and advocacy.

Hancock, Labonté and Edwards (1999) extended this conceptualization into a model, describing three categories of indicators that address the determinants of community

health as identified by Labonté (1994), the processes by which to achieve them, as well as health status indicators that could be used to measure them (see Table 2.1).

Table 2.1 Indicators for community well-being (Hancock, Labonté & Edwards, 1999)

Indicator Categories			
Determinants	Processes	Health Status	
Sustainability	Education	Quality of life	
Energy and water use	Early childhood development	Well-being (including health	
Renewable resource use	Education / school quality	measures)	
Waste production and	Adult literacy	Life satisfaction	
reduction	Lifelong learning	Happiness	
Land use			
Ecosystem health			
Viability	Governance	Mastery / Self-Esteem /	
Air and water quality	Voluntarism / associational	Confidence	
Production and use of toxins	life		
Soil contamination	Citizen action		
Food chain contamination	Human and civil rights		
Livability	Voter turnout	Health promoting behaviours	
Housing	Perception of government	Little negative behaviours	
Density	leaders and services	such as smoking and drinking	
Community safety and security	Healthy public policy	Physical activity	
Walkability		Healthy nutrition	
Green / Open spaces			
Smoke-free spaces			
Noise pollution			
Conviviality		Disability / Mobility / Mental	
Family-safety and security		Health	
Sense of neighbourhood		Stress / Anxiety	
Social support networks		Other morbidity / disability	
Charitable donations		measures	
Public services	1	Health utility index	
Demographics			
Equity		Mortality	
Economic disparity		Overall mortality rate	
Housing affordability		Infant mortality rate	
Discrimination and exclusion		Suicide rate	
Access to power			
Prosperity			
A diverse economy			
Local control			
Employment / unemployment			
Work quality			
Traditional economic			
indicators			

The model suggests that the study of community well-being should examine indicators of the determinants of health such as education and ecosystem sustainability, and indicators of community processes important for health outcomes such as governance. However in terms of outcomes, the focus was on individual level health indicators.

The authors maintained that there could be some merit to the development of a reasonably standard set of core indicators that could be used for comparison purposes nationally and even internationally. At the same time, it would be more important that a community select measures that matter in its own life, thus acknowledging the importance of the community's experience in determining well-being.

Community psychologists Prilleltensky and Prilleltensky (2007) also defined interconnected webs of well-being, but uniquely as they are experienced by people. According to their model, well-being can take place within four sites; a person, a relationship, an organization or a community (see Table 2.2). Each site was described as unique but dependent on others. The authors defined signs of well-being as manifestations or expressions, and defined sources of well-being as the enablers or conditions for achieving well-being. In discussing strategies to enhance well-being, the authors emphasized the importance of having interventions or strategies that address the range of sources and sites of well-being. The well-being of a site is reflected in a particular sign, which derives from a particular source and is promoted by a certain strategy. For example, personal well-being is reflected in control, which derives from opportunities to exercise voice and choice, and is promoted by empowerment.

An advantage of the Prilleltensky & Prilleltensky model is that it broadly considers the conditions or sites that enable people to experience well-being. However, it does not explicitly address health-enabling macro-level policy issues such as healthy public policy, sustainable management and use of natural resources, nor does it reference individual differences in health-promoting behaviours.

Table 2.2 Webs of well-being (Prilleltensky & Prilleltensky, 2007)

Sites	Signs	Sources	Strategies	Synergies
Persons -	Sense of control Personal health	Opportunities to exercise control, voice and choice	Strategies or interventions that increase well-	The integration of sites, signs, sources and
Relationships	Caring, respect for diversity, support, democratic participation	Positive experiences of trust, nurturing and affection	being (e.g.: increased social support, a recycling program that employs	strategies for increased well-being.
Organizations	Engagement and learning opportunities, clear roles, collaborative relationships	Traditions of learning, inclusion and horizontal structures.	persons with disabilities, etc.)	
Communities	A clean environment, freedom from discrimination, good schools and employment opportunities.	Fair allocation of bargaining powers, resources and obligations in society, access to education, health care, clean environment		

From the fields of urban consulting and psychology, Christakopoulou, Dawson and Gari (2001) drew on previous population health-related, sociological, political and economic research to define community well-being as dependent on the well functioning of, and balance between physical, social, economic, political, psychological, and cultural settings, as experienced by residents.

Table 2.3 Theoretical underpinnings of community well-being (Christakopoulou, Dawson & Gari, 2001)

Areas as a place to live	Satisfaction with physical conditions has been related to negative community outcomes such as neighbourhood pessimism, fear of crime, and attachment to a community. Therefore, the authors felt it important to include feelings about the local environment, safety and satisfaction with provision of services and facilities.
Areas as a social community	The social functioning of a community is crucial to its viability and ability to solve problems and exploit opportunities. Also, sense of community, or "a feeling that members have of belonging, a feeling that members matter to one another and to the group and a shared faith that the members' needs will be met through their commitment to be together" has been inversely linked to feelings of loneliness and alienation, loss of local autonomy and reduced personal involvement in the local community.
Areas as an economic community	The economic strength of individuals and local areas is fundamental to quality of life. There is a well-established link between factors such as unemployment, underemployment, low income, and outcomes such as poor health and isolation. The availability of local shopping supports a local economy but also provides a meeting space for residents. In addition, it facilitates the acquisition of goods for those who aren't as mobile as others such as the elderly or people who do not own vehicles.
Areas as a political community	Structures of political representation and public participation provide mechanisms for citizenship and empowerment. A lack of open processes threatens participation and community cohesion. It has been found that resident involvement in planning and decision making influences project quality and sustainability to enhance local quality of life. As such, participatory decision-making processes are deemed to be important.
Areas as a personal space	Memories and experiences shape the way people perceive places and contribute to their attachment. Displaced community attachment can cause isolation and grief. Therefore, a measure of community attachment is included.

Their proposed indicators include attachment to one's community, satisfaction with services and facilities, satisfaction with the environment, participation in decision-making processes, extent of informal social interaction, income sufficiency, feeling of safety, and community spirit or resident togetherness. Their theoretical rationale is described in more detail in Table 2.3.

Christakopoulou et al. (2001) drew on these theoretical underpinnings to create the Community Well-Being Questionnaire. The questionnaire was found to be effective in measuring the proposed elements of community well-being. It did not, however, include questions about the availability of employment, nor did it include any individual health questions (physical and psychological, healthy behaviours, etc.), that at an aggregate level, are deemed by others to be important indicators of community well-being (Hancock et al., 1999).

Governments and not-for-profit associations have also given much attention to the concept of community well-being. Their interest stems from a duty to provide services that taken together meet the needs of populations and enable well-being. For example, Australia's Rural Assist Information Network (2000), a network concerned with rural quality of life issues, defined community well-being as follows:

...a concept that refers to an optimal quality of healthy community life, which is the ultimate goal of all the various processes and strategies that endeavour to meet the needs of people living together in communities. (Rural Assist Information Network, 2000).

The Network described its conceptualization as encapsulating the ideals of people living together harmoniously in vibrant and sustainable communities, where community dynamics are clearly underpinned by 'social justice' considerations. The definition implies that certain more collectivist values underlie community well-being.

Economists have been engaged in developing measures of well-being to inform policy.

For example the NEF, whose slogan is "economics as if people and the planet mattered",

proposed going beyond the use of Gross Domestic Product as a measure societal well-being or progress, to instead developing a range of national indicators of well-being (NEF, 2009). This movement was brought about by the argument that concerns with economic progress have negatively impacted well-being in many ways. Economic globalization and trade liberalization have promoted longer working hours; raised levels of indebtedness; limited opportunities for individuals, families and communities to make choices and pursue health enabling activities; and pushed our natural environment beyond its limits. The NEF defined well-being as "dynamic processes that give people a sense of how their lives are going, through interaction between their circumstances, activities or psychological resources". In this sense, the NEF suggests that enhanced well-being can enable individuals (and communities) to react more creatively to difficult circumstances, to innovate and constructively engage with the world around them and contribute to better outcomes.

The NEF (2009) developed a measure called the National Accounts of Well-Being for use throughout Europe. This measure includes various dimensions of personal well-being (feelings, functioning and psychological resources), two dimensions of social well-being (supportive relationships and trust/belonging), and well-being at work. The measure was used in a comparison of European countries and revealed that the relationship between the conditions of people's lives and their experiences of well-being needs a more textured assessment of well-being to be fully understood. For example, trends in well-being were associated with volunteering, having a disability, television-watching, involuntary unemployment and fear of crime, all of which can have policy consequences. The report concluded that further work is needed to operationalize a

multi-layered, broad framework that combines indicators for social and environmental sustainability. The measure could also be broadened to include some measure of community-level resources and healthy public policy. The purpose of this type of approach was to promote the collection of data relating to social and economic indicators of well-being on an ongoing basis to facilitate comparisons across time and across regions and that can be incorporated into decision-making support systems (Force & Machlis, 1997). This type of approach relies more heavily on aggregated statistical data on individuals, and often does not take into account community characteristics such as quality of services or natural environments, etc.

Motivated by the inadequacy of measures for well-being of populations, the President of the French Republic Nicholas Sarkozy commissioned a report with the purpose of developing better measures of economic performance and social progress. The commission developed a conceptual model of well-being that included a range of measures including material living standards, health, education, personal activities including work, political voice and governance, social connections and relationships, current and future environment conditions, and economic and physical insecurity (Stiglitz, Sen & Fitoussi, 2009). The commission emphasized the importance of capturing information on inequalities, household units and non-market activities. Also, the report highlighted specific challenges with developing measures of environmental stocks, but provided suggestions for directions in which to proceed. The model considers the role of social, political, economic and environmental influences on well-being. However, it does not explicitly consider community-level characteristics or resources that enable well-being, such as gathering areas or availability of services.

Since 1998, the Department of Statistics of the Government of Newfoundland and Labrador developed community well-being accounts based on a perspective on wellbeing similar to that of the NEF (2009) and Stiglitz, Sen and Fitoussi. (2009). Beyond developing a model for data collection that can influence political decision-making, the goal of this on-line Community Accounts resource was to make community-level data on well-being available to residents, community groups and policy makers. Several micro to meso-level domains of well-being were identified: health; social relationships; demographics, community safety and social vitality; income consumption and leisure; social relationships; society, culture, politics and justice; autonomy, equality and security; education, training and skills (human capital), and employment and working conditions. These factors are shaped by macro variables such as eco-system well-being, natural resource capital, knowledge capital, infrastructure and production capital and production (May, 2005; May, 2007). The model recognized the importance of individual, community, and broader environmental and economic factors in examining the wellbeing of individuals, communities and societies. Compared to other models of community well-being reviewed above, this Community Accounts model lends greater importance to community-level aspects of well-being such as the availability of services. Also, the approach of making the data publicly available implies underlying values of social justice and democracy in that communities are empowered with the information to assess their own well-being needs, and use it to advocate for services on their behalf, or design interventions themselves.

Few researchers have developed models of community well-being specific to rural or remote communities. The multi-disciplinary team that conducted the Coasts Under Stress

research project described health as comprised of three categories: human health, situated within community health, positioned within biophysical health (Dolan et al., 2005). First, human health was described according to the World Health Organization definition seen above (i.e. a broader conceptualization than simply the absence of disease or infirmity). Second, community health was defined as the condition of a socio-economic and environmental system where the three components are organized and maintained in such a way as to promote well-being of both humans and the natural environment. As such, the healthy community experiences relatively high levels of social support, a culturally acceptable standard of living, less rather than more inequality, and benefits that augment individual well-being and provide for low levels of social dysfunction. Third, biophysical health was described as the result of relatively low levels of human-induced morbidity or mortality of all species, along with low levels of environmental contaminants that induce mortality or morbidity.

Also as part of the Coasts Under Stress research project, MacDonald, Neis and Grzetic (2005) stated that when considering community and individual health, it is important to consider that power relations mediate social relations, institutions and individual abilities or capacities that enable health and well-being. Power relations also inform our relationships with the biophysical, social and built environments, and influence access to material and social health requirements.

Referring to the Dolan et al. (2005) model, Ommer (2007) further described the health of communities and the environment as extending to those interactions between communities and their environments in ways that sustain quality of life and promote resilience in response of stressors (socio-ecological health). An advantage of this model

is that by positioning human health within community health and both of these within bio-physical health, the model implies that processes operating within social, environmental and cultural contexts have interdependent, reciprocal and non-linear relationships and feedback effects, and also complex causality.

In summary, the conceptualizations and models of well-being reviewed above that were developed by scholars, government agencies and not-for-profit associations go beyond individual health indicators to incorporate social, economic, environmental and political factors. These factors can be considered at the individual, community and societal levels (from the micro to macro-level influences). For the purposes of this project, community well-being will be conceptualized as inclusive of aggregate individual and community-level measures of psychological and physical health, social interaction, feelings about the community, safety, built and natural environments, quality of services, democratic processes, and economies that create employment opportunities and sufficient income (see Figure 2.1).

As with most of the well-being models presented in this chapter (for example, Hancock et al.1999; NEF, 2009), the conceptualization of community well-being for this research project includes dimensions or facets of well-being and does not depict relationships between collective determinants and individual outcomes. The literature review that follows this section outlines the interconnectedness of collective and individual factors (e.g. link between unemployment and poor mental health). The purpose of this model is to outline all these individual and collective factors as dimensions or indicators of community well-being in and of themselves. Nevertheless, the goal of the project is to study community-level well-being, and to examine even individual dimensions at the

aggregate level. That is, a community is not well if there is a high rate of isolation, a high degree of crime, or high rates of individual health problems.

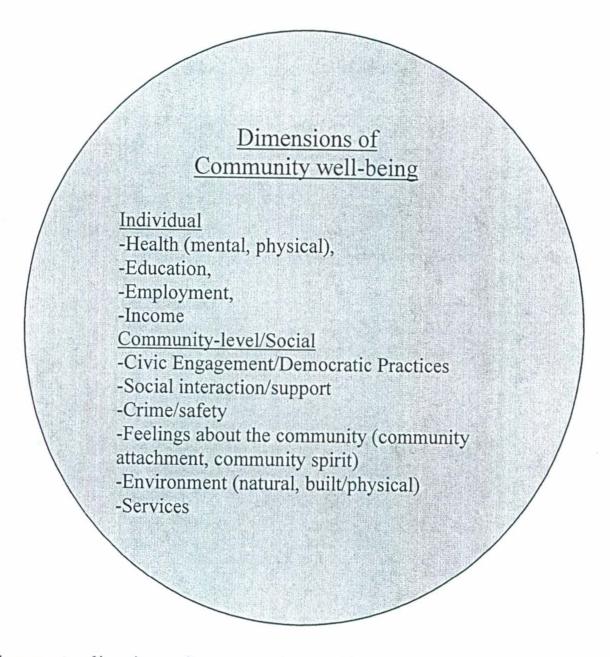


Figure 2.1 Conceptualization of community well-being dimensions for the research project

Figure 2.1 presents the proposed dimensions of community well-being for this research project. For a discussion of indicators and measurement of these dimensions, see Chapter 3, Section 3.3.2.

2.2 Measurement of Community Well-being

Kusel (1996) and others (Ribova, 2000; Hancock et al., 1999) have cited variability in the use of qualitative data and quantitative measures in studying community well-being.

Both approaches have benefits and limitations. For example, quantitative approaches that measure dimensions of well-being using indicators such as median family income, rate of

low income, migration, employment and educational attainment (Beckley & Burkosky, 1999; Stedman, Parkins & Beckley, 2005; Stiglitz et al., 2009) as well as survey data (Christakopoulou, Dawson & Gari, 2001; Gien, 2000; NEF, 2009; Stiglitz et al., 2009) allow for a more standardized comparison of communities and are more conveniently used by policy makers and managers.

In contrast, qualitative approaches allow us to draw out factors that are most salient for well-being for a particular community and its residents by exploring the way people perceive them and are affected by them either directly or indirectly adopting behaviours that impact their health and well-being (agency) (Davidson, Kitzinger & Hunt, 2006; Popay et al., 2003; Williams & Popay, 1997; Wilson, 2003). Qualitative methods enable the description of resident perspectives on well-being and of social/relational or structural factors within a community that can influence well-being Parkins and Beckley (2001) demonstrated that there can be a considerable gap between community performance on a standard suite of indicators and perceived quality of life when they complemented their quantitative data with interviews. A mixed methods approach is designed to integrate the benefits of quantitative and qualitative methods (e.g., Dolan et al., 2005; Ommer, 2007). That is, a more comprehensive understanding of community well-being can be achieved by combining aggregated, quantitative data with an exploration of well-being and its influences at the community level through qualitative and quantitative methods.

2.3 How Does A Rural Economic Crisis Influence Community Well-Being?

The most devastating feature of economic crisis or loss of an economic base for rural communities is often the accompanying losses of employment and earned income and a

subsequent loss of population (Fowler & Etchegary, 2008; Hamilton & Butler, 2001; MacDonald et al., 2009).

As part of the Coasts Under Stress research project, MacDonald et al., (2006) found that on the northern peninsula of Newfoundland, changes in fields of opportunity or power relations were brought about by the restructuring of both the fishery and forestry sectors. These changes influenced the work made available to logging contractors, sawmills, pulp plants and fish plants, and resulted in reduced employment opportunities. This in turn led to increased self-employment, employment uncertainty, seasonal migration and outmigration, and reduced employment.

Ommer (2007) described the nature of the changes in the fishery since the collapse of the cod stocks and the associated changes in employment and income security for coastal communities in Newfoundland. In the absence of cod, harvesting activities in the inshore and midshore sector fisheries turned to snow-crab, lobster and sometimes shrimp (these were the dominant species harvested around 2004). The shrimp fishery had been more vulnerable to the impact of pricing due to competitive markets. The snowcrab fishery was the most lucrative in the province's history. However, the benefits were much less equally distributed than in the days of the cod fishery. Midshore crab harvesters who obtained licences during the '80s received much larger quotas than those who obtained licences in the '90s. Small-boat harvesters were granted permits and small quotas after the cod moratorium. This situation often perpetuated gross income inequalities between fish harvesters living in the same communities. For example, the advanced capacity of midshore boats enabled them to meet their quotas in only a few trips, and draw EI for the remainder of the year while inshore crab fishermen work a much longer season to obtain

their smaller quotas. Compared to fish harvesters, workers in the processing sector have not experienced the benefits of the crab boom. Most of them are challenged to make ends meet, and are plagued with feelings of uncertainty about getting enough work to meet EI requirements and being able to stay in their communities (Ommer, 2007). In summary, changes in the fishery in Newfoundland and Labrador have led to a loss of jobs, and varying levels of economic challenge, often between families in the same communities.

This section outlines some known effects of loss of income, unemployment and job insecurity on community well-being variables such as mortality, self-rated health, psychological health, health-related behaviours, crime, physical environment and availability of services.

2.3.1 Income and Health

Much of the evidence for the relationship between health and income in Canada is derived from studies comparing mortality or morbidity rates (specific and all cause) using census tract of residence. In a review of 50 Canadian studies on the health-income relationship, Raphael et al. (2005) found that over half of the studies linked decreased income with higher morbidity (physical and psychological illness). According to the review, very few Canadian studies supported a link between income and mortality.⁹

Several theories exist about the pathways between income and health. The most popular theories stem from the early 1980s work of the Department of Health and Social Security

⁹ Note: Since the Raphael (2005) review, James, Wilkins, Detsky, Tugwell & Manuel (2007) has found that the negative relationship between income and years of life lost for some causes has not greatly decreased in Canada over the last 25 years, since the implementation of comprehensive health insurance.

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in the U.K. that published the Report of the Working Group on Inequalities in Health, also known as the Black Report (DHSS, 1980). Since that report, a debate arose on how to explain socio-economic disparities in health with the following main theories emerging.

Biological pathways are the physiological mechanisms by which researchers explain how income influences health (Lundberg, 1993; Power & Hertzman, 1997). Materialist approaches describe how differences in income lead to differential exposures to health-damaging or health-enhancing elements in living or working conditions (Shaw, Dorling, Gordon & Smith, 1999). Neo-materialist approaches extend these linkages to the lack of resources/supports or public infrastructure that are typical of areas with high density of lower-income residents (Lynch, Smith, Kaplan & House, 2000). Psychosocial pathways are the explanations related to either experiences of belonging to a particular social class or the stress associated with differing income levels or socio-economic inequality (Kawachi & Kennedy, 2002; Wilkinson, 1996, 2000). Behavioural/cultural explanations focus on health-related behaviours associated with particular income levels (DHSS, 1980). Political-economic analyses are about the political, economic and social forces that influence income and income distribution and the societal structures that mediate the income and health relationship (Raphael, 2006).

In a review of 241 Canadian studies on the relationship between health and income, Raphael et al. (2005) concluded that most of these approaches offered little theoretical conceptualization of the linkage between income and health (64%). Close to half of the studies were ranked as being of intermediate complexity (i.e. associated the incomehealth relationship to other variables such as education) and offered little insight into

causal factors or interconnectedness of pathways. The authors identified inconsistencies between findings that highlighted the importance of social determinants of health, and current Canadian health policy that focuses on individual behavioural risk factors. The authors also stated that more research is needed to uncover jurisdictional differences in the extent to which health is dependent on income alone. For example, some communities may have greater access to publicly funded health-supporting resources than others. Though not explicitly stated by the authors, the findings point to a need for a greater community-level understanding of the dynamic relationship between social factors and health.

The impact of income levels on health in a rural resource depletion context was studied through the Coasts Under Stress project, among residents in communities affected by economic crises. The results of logistic regression modelling found that income was a significant predictor of self-rated health (Ommer, 2007).

2.3.2 Socio-economic Status and Health

Since the Raphael et al. (2005) review, Dunn, Veenstra and Ross (2006) tested the hypothesis that both neo-material and psychosocial pathways mediate the relationship between income and health. The authors assessed the relationship between self-rated health status and survey measures of absolute and relative socio-economic status (personal income, household income and education), and perceived relative socio-economic standing (relative to previous generations and relative to other Canadians). Actual absolute, actual relative and perceived socio-economic status relative to other Canadians were positively related to self-rated health status, while perceived socio-economic status relative to previous generations was not. As previously discussed, this

point is particularly salient for Newfoundland communities with families experiencing varying levels of deprivation or income challenges.

In a review of health disparities caused by three proposed social determinants of health in Canada – Aboriginal status, income and place - Frohlich, Ross, and Richmond (2006) suggested that these social determinants of health can be more effectively described in terms of people's relative opportunities, resources and constraints. In doing so, the authors wish to distance themselves from the "unnecessary" distinction between popular explanations reviewed above (i.e. materialist, psycho-social and behavioural), suggesting that they are all indicative of unequal chances in life. The authors reviewed evidence for linkages between health and Aboriginal status, income and place, and conclude that all three determinants share commonalities with regards to the distribution of power and resources related to health.

Firstly, Frohlich et al. (2006) proposed that the disproportionate burden of morbidity and mortality within the Aboriginal population is related to unequal access to "resources" and "opportunities" to participate in the workforce resulting in high unemployment and social assistance rates. Access to "resources" is further limited by lagging education completion rates and increased disadvantage. High rates of family violence, suicide, social suffering and lack of control over land demonstrate the "constraints" on Aboriginal people's ability to flourish and develop in happy, healthy environments.

Secondly, in considering the social determinant of income, Frohlich et al. (2006) argued that the Black Report and the research that has followed has demonstrated that income inequity translates into major inequities in material "opportunities" and "resources"

available. The review also suggested that Canadians in lower income groups adopt poorer health behaviours. The authors, however, recommended improving access to all types of resources (not only education) to improve health. While social spending can help counter health disparities by income, under-investment will disproportionately affect those who have fewer resources to fall back on.

Lastly, the authors contended that the research on the health effects of place demonstrates that some neighbourhoods provide more equitable access to opportunities than others. Places can both constrain and enable health. Where they are dangerous, dirty and uninviting, the potential for interaction and health promoting activities are more limited. The authors conclude by suggesting that policy efforts should be made to balance out opportunities and resources for all citizens (considering factors such as quality of education and neighbouring conditions, along-side income).

2.3.3 Unemployment and Health

Research using longitudinal data in Canada and the United States demonstrates the relationship between income inequality and mortality in Canada is only observable when the unemployed are included in the sample (Sanmartin et al., 2003). That is, exclusion from the labour market matters more for health in Canada than in the United States, where health-income inequalities hold across all types of employment situations. This finding highlights the importance of labour market incomes and employment in Canada. Mathers and Schofield (1998) found that unemployed men were at a higher risk of mortality than unemployed women.

Svedberg, Bardage, Sandin, and Pedersen (2006), using data from 1973 to 2002, found that unemployment was related to future poor self-rated health, after controlling for age, sex, illness, education and socio-economic status. Loss of employment has been related to mortality in both men and women in longitudinal studies, after adjustment for health behaviours and other socio-economic variables (Morris, Cook & Shaper, 1994).

Employment has also been found to promote recovery from illness (Bartley, Sacker & Clarke, 2004).

Much research has demonstrated an association between unemployment and psychological health. A recent meta-analysis of 237 cross-sectional and 87 longitudinal studies revealed that unemployment is not only correlated to distress, but can cause it (Paul & Moser, 2009). The effect was detected on a large range of mental health indicators (mixed symptoms of distress, depression, anxiety, psychosomatic symptoms, subjective well-being, and self-esteem) and was supported by the finding that reemployment after a period of unemployment was associated with an improvement in mental health. These effects have been found in longitudinal studies independently of pre-existing health problems and personality characteristics which increase vulnerability to poor mental health (Bartley, Ferrie & Montgomery, 1999).

Some evidence has pointed to present financial strain as the strongest mediating factor between unemployment and psychological health (Kessler, Turner & House, 1988; Leeflang, Klien-Hesselink & Spruit, 1992). Research in Finland revealed that anticipated financial problems and loneliness have also been reported as major mediators (Leeflang et al., 1992), demonstrating the psychological benefits of work that provides secure and adequate income.

One foundational explanatory theory for the association between unemployment and psychological health is Marie Jahoda's 'latent functions' of employment model, which includes psychological benefits such as the provision of time structure to the day, enforcement of activity, regular sharing of experiences and contacts with others, linking an individual to goals and purposes that transcend his/her own, and defining aspects of personal status and identity. Other key benefits of employment described are self-esteem and the respect of others (Jahoda, 1982).

Classical arguments for the benefits of work have recently been expanded to a psychology-of-working perspective, which has emerged from critiques of the traditional fields of vocational and industrial/organizational psychology by feminist traditions and expanded epistemological analyses of psychological explorations of working (Blustein, 2008). This work identifies a need to further explore the need for survival, relational connections, and self-determination and how they lead to well-being through employment.

With regards to the effect of unemployment on health in a rural resource depletion context, research conducted with residents of 23 rural communities on in the Bonavista region of Newfoundland (Gien, 2000) examined the relationship between loss of employment due to the fishery collapse and reported psychological well-being. Six hundred survey respondents answered questions relating to life satisfaction and stress, and the General Health Questionnaire-28 (GHQ-28), an anxiety and depression questionnaire. Differences in GHQ-28 scores for unemployed and employed individuals were not statistically significant. However, unemployed individuals reported poorer mental health in terms of satisfaction with their lives, their family lives and themselves.

The study also revealed that both employed and unemployed residents reported stress in their lives at the time, which was attributed to the stress of unemployment on family relationships as well as the ripple effect of economic uncertainty on the viability of other jobs in the communities (closures of businesses due to decreased spending, etc.).

Other research projects have further investigated the gendered impacts of the fishery decline and employment changes on health (MacDonald, Neis & Murray, 2008; Ommer, 2007). Such research has suggested that in families where the men were fish harvesters, the women have also begun to take on fish harvesting work in the family enterprise rather than hiring other workers to do so, in order to achieve the associated cost savings during a time where fish harvesters earn less and processing work typically done by women is more scarce. This phenomenon resulted in women's increased stress as they assumed extra duties and spent more time away from their home and children, while still being responsible for household and parenting duties. The work has also presented occupational health risks for women due to lack of training and general ill-preparedness for undertaking fish harvesting work.

Within the Coasts Under Stress research project, regression models were used to predict self-reported emotional health and stress among residents of declining Canadian coastal communities. The models found that the probability of reporting the same or better emotional health was higher for people with an improved economic and employment situation, and the probability of reporting higher stress increased with no full-time employment (Ommer, 2007).

2.3.4 Unemployment and Health-Related Behaviours

Cross-sectional studies of men have linked unemployment to smoking (Waldron & Lye, 1989) and alcohol drinking (Lee, Crosbie, Smith & Tunstall-Pehoe, 1990). A prospective cohort study of British men in the early 1980s found that loss of employment was related to subsequent weight gain (Morris, Cook & Shaper, 1992). Another study of unemployed French men using survey data from the early 1990s produced similar results (Khlat, Sermet & Le Pape, 2004); unemployment was related to both regular and heavy smoking, and heavy alcohol-drinking.

A review of studies on the effects of unemployment also revealed a link between unemployment and increased accident rates and alcohol consumption in the general population, and smoking in youth (Hammarstrom, 1994). A longitudinal prospective study which considered previous health behaviours found that unemployment was related to low body weight, continuing to smoke, beginning to smoke, and problem drinking (Montgomery, Cook, Bartley & Wadsworth, 1999).

2.3.5 Job Insecurity and Health

A growing unpredictable economic situation and tougher competitive standards result in downsizing, mergers, and other types of structural change, which produce increased feelings of insecurity among workers, not only about their jobs but the future in general (Sverke, Hellgren & Naswall, 2002). Lazarus and Folkman (1984) argued that like any stressor, job insecurity (threat of job loss) leads to strain and reduced well-being and negative emotions toward the perceived source of stress. The prolonged uncertainty makes it more difficult for the individual to use effective and appropriate coping strategies. Job insecurity (threat of job loss) has been found to affect health by causing

psychological disturbance, physiological changes and consumption of medical care, particularly with the absence of anticipated alternate work (Bartley et al., 1999).

Mattiason, Lindgärde, Nilson and Theorell (1990) found that male shipyard workers who were anticipating unemployment experienced increased serum cholesterol and a higher rate of sleep disturbance, which were often accompanied by increases in blood pressure.

A meta-analysis of job insecurity and health outcomes conducted in 2002 revealed that overall, mental health was more affected by job insecurity than physical health (Sverke, Hellgren & Naswall, 2002).

In conducting the prospective cohort Whitehall II study, Ferrie, Shipley, Stansfield and Marmot (2002) found that loss of job security between 1995/96 and 1997/99 resulted in adverse effects on self-reported health and minor psychiatric morbidity as measured by the GHQ-30 and a four-scale depression index. Individuals exposed to job insecurity over a period of three to four years measured by a job security survey question reported more illness (a combined measured of self-rated health and presence of illness and minor psychiatric illness).

2.3.6 Community Economic Downturn and Health

Research on the impacts of economic and social dislocation associated with the American farm crisis of the mid 1980s revealed negative effects on psychological health for residents of rural communities. Conger et al. (1991) found that the changing economic fortunes which made life problematic and the future unclear had negative effects on all family members. Path analysis conducted on the data from a survey of 76 rural families suggested that stress felt by parents exacerbated irritable behaviours, in turn increasing the risk of alcohol abuse by early adolescents, over and above experimentation levels.

Another study of communities affected by the farm crisis found that men living in the most rural places had significantly greater increases in depressive symptoms than those living in other places (Hoyt, Conger, Valde & Weihls, 1997). Unfortunately, because of stigmatized attitudes towards mental health care, this group was also least likely to seek help, putting them at risk for continuing problems.

Ommer (2007) reported higher stress levels, poorer ratings of self-reported health, and greater perceptions of alcohol abuse and family violence in the community in a Newfoundland coastal area (clusters of communities) that had most recently experienced economic downturn due to the fishery collapse. Residents in these communities reported higher stress levels, due primarily to the lack of employment brought about by restructuring of the fishery. The project found that rates of cardio-vascular morbidity were comparatively higher than provincial and national rates. Ommer concluded that morbidity and mortality rates, when compared with provincial rates, were suggestive of the effects of restructuring.

Fowler and Etchegary (2008) found support for a positive link between community economic crisis and mortality among elderly (75 years or more). The economic crisis was also suggested to influence the use of outpatient care, as revealed by interviews with residents. Residents suggested that out-migration of working-aged residents resulted in loss of informal care supports for elderly people.

In a recent call for further research, Bambra (2010) suggested that current recessions and the accompanying economic downturns will impact health more severely than in previous decades due to changes in income supports and the nature of work. The former is related

to increased difficulty in accessing the welfare and the social safety net programs as well as declining value of income supports (i.e. increases have not kept up with inflation and rising costs of living). The latter is related to increases in insecure work (contract or no-contract). Insecure employment has a negative impact on health, as previously described in this section.

Community economic downturn is said to lead to greater educational attainment. As cited in Chapter 1, young people in rural areas are achieving higher levels of education than prior to the fishery collapse (Fowler, 2007; Ommer, 2007). High school completion rates have increased from 62.7 % to 82.8% between 1987 and 1996, and are very close to provincial completion rates. However, average rural scores on provincial exams continue to be lower than the provincial average (Lysenko & Voden, 2010). The increased value that rural students place on their education was reflected in interviews conducted as part of the Coasts Under Stress project, which was described as encouraging by the project team. Unfortunately, most youth planned to leave the community after completing highschool, for better educational and employment opportunities (Ommer, 2007). Young people interviewed expressed concerns about the quality of the education they were receiving, and whether it was sufficient to prepare them for post-secondary education.

While the educational outlook for youth is promising, the educational and skills levels of older adults in rural areas of Newfoundland are less so. This rural cohort continues to be more dependent on primary industries and seasonal employment than their urban counterparts, with 68% of the rural labour force being employed part of the year compared to 40% in urban areas (FFAW/CAW, 2004). The minimum skills requirements for jobs in primary seasonal industries has historically negatively affected the quality of

the labour force in Newfoundland and Labrador, and discouraged people from continuing education and professional development (APEC, 2005, Crowley 2002, 2003).

Based on these trends for both youth and adults, it appears that the overall result is a lack of employment skills in rural areas of the province.

2.3.7 Community Environment/Services and Health

A study utilizing the National Health Survey of the United Kingdom found that residents of neighbourhoods with high unemployment rates rated their own health poorly. Poor self-rated health was also associated with other neighbourhood attributes such as poor physical environments (missed waste collection, public housing vacancy, derelict properties) and low access to private transportation (Cummins et al., 2005). The effect of neighbourhood decline on health was said to operate through limiting opportunity for physical activity, but also increased stress from environmental cues. The effect was independent of individual social class, age, sex and economic activity. Concerns for the effect of economic crisis on health should also consider whether the unemployment is accompanied by deterioration in community environments. The link between low levels of socio-economic status and poor housing quality and municipal services has been observed in previous studies (Robert, 1998).

These effects may be exacerbated in rural communities in Newfoundland and Labrador (and perhaps in Canada more generally), where the population (tax base) has been declining, and the often accompanied regionalization of services has created more distance between communities and some services. The Coasts Under Stress project

found that satisfaction with a range of services was for the most part, poorer in communities that were further from the regional centre (Ommer, 2007).

2.3.8 Unemployment and Crime

Chiricos's (1987) meta-analysis of unemployment and crime studies showed that property crimes were consistently and significantly related to unemployment, though much of the data was collected on urban populations. Studies using large data sets have supported the positive association between unemployment and crimes on property (Raphael & Winter-Ebner, 2001) in the general population as well as in men (Gould, Weinberg & Mustard, 2001). Others have also found an association between neighbourhoods of lower socio-economic status and higher levels of actual crime and perceived crime (MacIntyre, MacIver & Sooman, 1993; Sooman & Macintyre, 1995; Wilkinson, Kawachi & Kennedy, 1998), which can directly affect health through bodily harm and indirectly affect health by increasing stress, promoting social isolation, and preventing healthy behaviours such as outdoor exercise.

Chiricos (1987) explained the relationship by an increase in motivation to supplement incomes through criminal activity. This is also known as the 'strain theory' (Cloward & Ohlin, 1960) which suggests that crime and delinquency results when people are unable to achieve their goals through legitimate channels. Agnew (1999) further developed strain theory to explain community differences in crime rates. Living in an economically deprived community is often accompanied by greater physical distance to viable employment, poor quality health care and education or other training services, all of which decrease the likelihood of being able to gain employment, thus having to achieve goals through illegitimate means. Agnew also suggested that the higher exposure to

negative stimuli in deprived communities increases levels of anger/frustration that lead to crime. The resulting interaction of more angry/frustrated individuals can even further increase the level of negative affect/stimuli in the community, causing higher crime rates.

Other explanatory theories include the social learning theory of crime, that associating with offenders increases the likelihood of criminal behaviour by exerting their negative influence or rewarding deviant acts (Burton, Cullen, Evans and Dunaway, 1994).

Alternatively, the social control approach (Hirschi, 1969) defined criminal or delinquent behaviour through a lack of positive stimuli or relationships with positive people or conventional institutions. Hirschi (1969) proposed factors the actor takes into account in making this decision to engage or not engage in illegal behaviours—such things as attachment to people or institutions, commitment to conventional lines of action, involvement in noncriminal activities, and belief in the moral validity of norms. In the case of violent crimes, the frustration-aggression theory of economic influences on crime elaborated by Hovland and Sears (1940) and Miller (1941), stipulated that frustration caused by economic downturn was carried out in aggressive acts towards vulnerable targets. The link continues to receive support (Green, Glaser & Rich, 1998).

Fowler's (2001) comparison of six communities in rural Newfoundland undergoing economic crisis suggested that criminal behaviour resulted both from a desire for material gain through illegitimate means (strain theory), and elevated frustration and aggression on the part of youth, suspected to be committing more vandalistic types of crimes.

Fowler (2001) noted that the finding was not consistent in all communities examined.

The Coasts Under Stress project (Ommer, 2007) found that of three Newfoundland coastal areas studied, perceptions of drug problems and family violence were greater in a community that most recently sustained substantial losses in employment.

In summary, previous research suggests that economic crisis and consequences such as unemployment, income loss and job insecurity can have devastating effects on physical and psychological health, as well as crime, the quality of services and the physical environment. In Newfoundland specifically, economic downturn has been found to be associated with increases in the use of health services (Ommer, 2007), in mortality among the elderly and in some types of crime (Fowler, 2001; Fowler & Etchegary, 2008; Ommer, 2007). Unemployment has been linked to poorer mental health (Gien, 2000, Ommer, 2007) and poorer cardio-vascular health (Ommer, 2007). More remote communities were also less satisfied with a variety of types of government services (Ommer, 2007). Young people are achieving higher education levels, but most intend to leave their communities (Ommer, 2007).

As stated in Chapter 1, some research has pointed to substantial variation in the impact of the economic crisis on the well-being of impacted communities (Murray et al., 2006; Ommer, 2007).

There is a need to more comprehensively ascertain the adjustment of these communities and their well-being since the turn of the 21st century. The timeframe of this research project extends on the findings of previous research by providing an update on how these communities have continued to adapt. There is also a need to develop a better understanding of community-level adjustment processes that may account for observed

variance in well-being effects observed between communities. The following section introduces the concept of "resilience" or the processes by which communities are able to adjust to adversity, and in turn, influence community well-being.

2.4 Rising Above a Crisis? Resilience Processes and Community Well-being

Originally, the concept of resilience was used mainly at an individual level. That is,
studies of resilience focused on trying to understand how individual people overcome
stressful situations (Dyer & McGuinness, 1996; Sonn & Fisher, 1998). In this context,
individual resilience is described as the capacity for successful adaptation, positive
functioning or competence despite high-risk status, chronic stress, or following prolonged
or severe trauma (Egeland, Carlson & Stroufe, 1993). This definition of resilience has
been compared to a personally trait, such as "hardiness" (Kobasa, 1982), including
factors such as the will to live, perception of a situation as challenging, sense of
commitment and control, sense of meaning, self-efficacy, and learned resourcefulness
(Antonovsky, 1987; Kobasa, 1982).

Some scholars have recognized that the concept of resilience as more relational or social and applied to human systems as well, such as families (Walsh, 2003) and communities (Adger, 2000; Kulig, 2000; Mangham, McGrath, Reid & Stewart, 1997), emphasizing that the whole is more than the sum of its parts. As observed by Brown and Kulig (1996), people in communities are resilient together, not merely in similar ways.

The concept of resilience has been more widely utilized to understand the adaptation of rural communities to challenges relating to environmental shocks, economic changes and other stressors. It is to this research that the remainder this section turns its attention.

Mangham et al. (1997) have studied community resilience in Nova Scotia, and defined it as the capability of individuals and systems (families, groups, and communities) to cope successfully in the face of significant adversity or risk. Geography scholar Adger (2000) highlighted the intimate relationship between ecosystem resilience (its ability to absorb a shock without significant change or its rate of recovery from a shock) and social or community resilience (including economic stability and ability to stay in the community).

Ahmed, Seedat, van Niekerk and Bulbia's (2004) definition of community resilience emphasized community capacities/resources (i.e., the development of material, physical, socio-political, socio-cultural, and psychological resources that promote safety of residents and buffer adversity). Other scholars have referred to resilience as actions or processes. For example, Pfefferbaum, Reissman, Pfefferbaum, Klomp & Gurwitch (2005) described community resilience as the ability of community members to take meaningful, deliberate, collective action to remedy the impact of a problem, including the ability to interpret the environment, intervene and move on. Kulig, who has studied community resilience from a population health perspective in northern Ontario, described it as the ability of a community to not only respond to adversity, but in so doing reach a higher level of functioning (Kulig, 2000).

Based on their literature review of 21 resilience studies conducted on the effects of disasters caused by humans, nature or technology spanning from 1973 to 2006, Norris, Stevens, Phefferbaum, Wyche and Pfefferbaum (2008) extracted two common themes in definitions: resilience as a set of capacities or resources, and resilience as a strategy (planning and associated action). The review led the authors to define community

resilience as a process linking a set of networked adaptive capacities to a positive trajectory of functioning and adaptation in constituent populations after a disturbance.

2.4.1 Desired Outcomes of Community Resilience

While Mangham et al. (1997) referred mainly to the effect of community resilience on individual health, Kulig (2000) suggested that its purpose was to achieve a higher level of functioning with respect to the broad determinants of health. Similarly, Norris et al., (2008) proposed that community adaptation has successfully occurred when there is "population wellness", or a high prevalence of wellness in the community. Though the authors did not refer to a population health or "determinants of health" framework, their definition of population wellness makes reference to individual well-being (mental and behavioural health) as well as community-level well-being (quality of services, public utilities).

2.4.2 What Facilitates Resilience?

Mangham et al., (1997) questioned why, when faced with a similar economic crisis (e.g. loss of the fishery in Nova Scotian communities), one community comes together to plan and implement or attempt alternative strategies, while another does not? At an individual level, resilience is found to be facilitated by coping skills, social supports, empowerment, self-esteem and self-efficacy (belief in the effectiveness of one's actions). Several factors were suggested to contribute to community resilience; mutual support, collective expectations of success in meeting challenges, and a high level of community participation. The authors also stated that organizing cooperatively, working hard voluntarily, egalitarian treatment of community members, and optimism, are predictors of resilient responses by communities. Finally, it was argued that community resilience

may be directly related to the level of community empowerment, or sense of control over its policies and choices (Mangham et al., 1997).

2.4.3 Community Resilience Models

Kulig (2000) criticized the approach of listing community characteristics that facilitate resilience, arguing that resilience must be seen as a process reflecting the dynamism and continued change in communities rather than a product. Kulig (2000) conducted a comparative study of resilience in three rural communities in Ontario, Canada (two successes and one failure in resilience). She attempted to identify with residents, the interaction of factors that contributed to resilience in the face of economic, environmental and health crises. A model was constructed to represent the findings. Resilience was described by three main components:

- 1) Interactions experienced as a collective unit; this includes getting along, a sense of belonging, and network, which taken in combination, lead to
- 2) Expression of a sense of community, or community togetherness and mentality/outlook for the future (hope).

The first two components were said to lead to the third.

3) Community action, which includes coping with divisions, community problem solving, visionary leadership, and a positive attitude toward change.

The strength of this model is that it is not linear but dynamic. Community actions and outcomes in turn, influence community interactions as a collective unit and sense of community. In describing community actions, Kulig (2000) did not describe their specific nature in addressing an economic crisis. Presumably, she was referring to the creation and execution of strategies that produce employment opportunities. Kulig noted

that resilience will be important for Canadian rural communities as they are particularly vulnerable to declining population, reduced economic viability, and an overall reduction of services due to their geographic setting and budgetary cutbacks. The model does not make explicit reference to the need for economic resources that often accompanies a crisis.

Based on their review, Norris et al. (2008) identified four sets of capacities or resources that communities draw upon when planning and reacting in response to a crisis or disaster:

- 1) Economic development resources, including level and diversity of economic resources and extent of equitable resource distribution.
- Social capital resources in the form of social support, informal ties, organizational linkages, citizen participation, sense of community and attachment to place.
- 3) Information and communications such as narratives (e.g. media spin on the disaster).
- 4) Community competence resources, including collective efficacy or belief in the effectiveness of organized community action (Perkins and Long, 2002), empowerment or involvement in decision-making, and supportive institutions.

Norris et al. (2008) noted that their conceptualizations of information and communications resources and community competence resources overlap substantially with literature on social capital, highlighting the relevance of the concept of social capital for community resilience research. Fowler and Etchegary's (2008) study of community

reactions to the cod moratorium also suggested that social capital (social networks, participation, volunteering) is a useful concept in studying a community's resilience or adaptation to an economic crisis. However, the authors cautioned that residents affected by too great an economic burden may be unable to socially participate in the resilience process as they cope with responding to their own family's basic needs.

2.5 Economic and Social Resilience Processes

Section 2.4 described models of community resilience that highlight the importance of social processes (ability to work together, social networks, confidence in the future) (Kulig, 2000; Norris et al., 2008) and economic processes (planning and execution of strategies to create employment opportunities) (Norris et al., 2008). Many of the social processes identified resonate with the concept of social capital as further described later in this chapter; norms of reciprocity, social networks, participation and volunteering (Putnam, 2000). The economic processes described (that of creating employment opportunities in a community) are commonly referred to as Local Economic Development (LED), a concept that will be reviewed in more detail in a later section.

The model presented in Figure 2.2 depicts LED and social capital as resilience processes that can mediate the effects of economic crisis on community well-being.

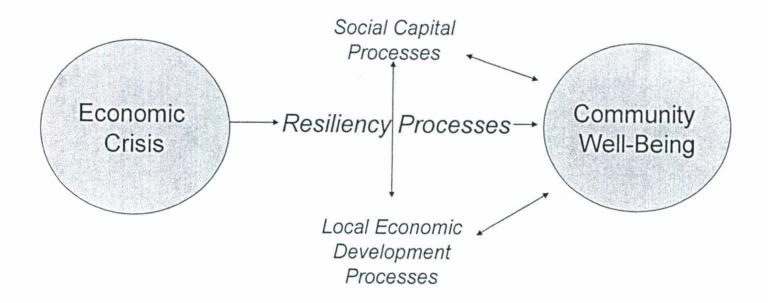


Figure 2.2 Resilience processes that mediate the relationship between economic crisis and community well-being

The illustration depicts the dynamic nature of resilience processes as capable of being affected by its outcomes (in this case, the various dimensions of community well-being). The remainder of the chapter describes these resilience processes, explores their relationship with community well-being, and finally examines the relationship between social and economic resilience processes.

2.6 LED as an Economic Resilience Process

LED that includes the creation of employment opportunities at the local level is one way that communities having experienced economic crisis can improve their situation. This section of the literature review pertains specifically to the situation of disadvantaged rural communities. In effect, LED has been proposed as a means to increase well-being for

disadvantaged communities through the creation of employment opportunities (Labonté, 1994).

In a recent review of LED conceptualizations, Toye and Chaland (2006) stated that LED generally happens with the goal of retaining or generating sufficient economic activity for the community's residents so that they can achieve and maintain an acceptable quality of life. The nature of these activities ranges from liberal to progressive, with liberal forms focussing on job and business creation, and more progressive forms including ideals of social justice and sustainability. As an example of liberal conceptualization of LED, Toye and Chaland (2006) cited Blakely and Bradshaw's (2002), who defined LED as a process in which local governments or community-based (neighbourhood) organizations engage to stimulate or maintain business activity and/or employment. The principal goal of LED is to stimulate local employment opportunities in sectors that improve the community using existing human, natural and institutional resources.

One example of the liberal LED approach is the Canadian Community Futures program, a national program whereby government-funded community based organizations engage local stakeholders in planning for economic development, and deliver a small business loan program to support aspiring and existing local entrepreneurs (Douglas, 1994; Fontan, 1993).

According to Toye and Challand's (2006) review, LED approaches become more progressive when they increase public participation, community ownership and control, and are inclusive of a greater breadth of perspectives and community interests. The authors cite Fontan's (1993) view that more progressive LED involves greater long-range

planning and community capacity building. While it is acknowledged that all activities along the spectrum may be referred to as "local" economic development because they happen in the community, only community economic development (CED) is premised upon the development of the community by the community – a fundamental distinction. The authors also cite Douglas (1994) who developed a similar conceptual distinction between LED and CED, emphasizing the central role of planning in CED based on participatory principles of democracy. Appropriate organizations are often developed to respond to the community's priorities and values. Ross and McRobie (1989) defined it as a process by which communities can initiate and generate their own solutions to their common economic problems and thereby build long-term community capacity and foster the integration of economic, social and environmental objectives. The Canadian Community Economic Development Network (CCEDNet) CED definition provided on the organization's web site is:

"... action by people locally to create economic opportunities and better social conditions, particularly for those who are most disadvantaged. CED is an approach that recognizes that economic, environmental and social challenges are interdependent, complex and ever-changing. To be effective, solutions must be rooted in local knowledge and led by community members. CED promotes holistic approaches, addressing individual, community and regional levels, recognizing that these levels are interconnected." (CCEDNet, 2010).

In the recent publication of *Planning Local Economic Development: Theory and Practice*4th Edition, Blakely and Leigh (2009) made a substantial departure from their previous

liberal definition reviewed above, citing its inability to effectively deal with major

economic development problems. The authors described two major problems of classic views of LED; growing inequalities and global warming, and developed the following definition to account for distributional and environmental aspects of economic growth (p.75):

Local Economic Development is achieved when a community's standard of living can be preserved or increased through a process of human and physical development that is based on principles of equity and sustainability.

Blakely and Leigh (2009) further qualified their definition by stating that LED needs to provide a minimum standard of living. That is, job creation should provide living wages so that employed families and individuals are not living in poverty. Also, the development should promote and encourage sustainable resource use and production.

The imperative for integrated and comprehensive approaches to local economic problems is supported by an increasing body of evidence in studies relating LED to social capital, social inclusion and the social determinants of health (Ommer 2007; Toye & Infanti, 2004).

2.6.1. LED/CED in Canada

Toye and Challand (2006) conducted a survey of 294 Canadian organizations involved in LED (CCEDNet members), and found that only 8% were doing "true" CED as defined by the network – comprehensive, long-term planning for the social and economic renewal of an entire geographic community. The authors explained that many surveyed organizations receive funding from government departments or agencies with segmented interests (more narrowly defined funding programs), precluding them from adopting

holistic approaches. The remainder are involved in activities that resemble more "liberal" forms of LED (enterprise development, human development, access to capital). While the survey results painted a grim portrait of CED in Canada, it is possible the research failed to recruit very small grass-roots organizations that may not be members of CCEDNet or define themselves as CED organizations.

2.6.2 The Economics of LED

Dale and Onyx (2005) explained that in recent years, small rural communities have been experiencing high levels of stress within the current globalizing context. Many of them are single-resource economies and therefore more vulnerable to global market forces.

Also, they are struggling to diversify their economies reactively. However, as Dissart (2003) stated, a region's ability to economically diversify is intimately tied to its endowments or paucity of resources, and often dependent on other factors that influence its competitiveness such as labour costs and transportation costs (e.g. distance from markets). Rural towns are experiencing the highest levels of population loss and economic decline of all types of communities (Dale and Onyx, 2005).

Loxley and Lamb (2006) described the economic dynamics of communities that provide the setting for LED. Convergence strategies of LED aim for community economic self-sufficiency (retain economic activity within the community). These approaches favour cooperative ownership, small scale production, control over economic decision-making, and the principles of production of goods and services for local use, local re-investment of locally generated profits, long-term employment of residents, and improved services among others. Convergence strategies can be contrasted with alternative ones that implicitly assume communities are too small to offer economic opportunities based on

local markets and hence should build their base on exporting goods or services.

However, a region with a narrow export base is more prone to disturbances resulting from changes in income levels in other regions than a region with a broad, more diversified export base. Historically, staple economies can be described as divergent, whereas convergent economies seek to keep production and profits within the community, and sell production output to other businesses and individuals within it.

Ambitiously, a convergent economy assumes that the political system is able to regulate or prohibit trade flows, impose taxes, take property into public sector hands, redistribute income and plan production. Many of these assumptions contrast current dominant policies.

According to Loxley and Lamb (2006), in Canadian society, at best only approximations of a pure convergence approach can be followed. Between these two extremes, there are other possible LED influences, such as public sector employment and import substitution strategy (providing services or goods that were previously imported). The authors added that state subsidies, volunteering of labour and social pricing (when individuals accept a higher cost to support local ownership, employment or environmental objectives) play an important role in the viability of local economies. Convergence-style LED can experience difficulty competing against much larger capitalist initiatives due to challenges such as small scale production, high overhead costs, the desire for socially acceptable wages that are sometimes economically uncompetitive and staff inexperience/training needs.

According to Hayter (2000) and Ommer (2007), the Canadian economy remains weak on research and development, and strong on export-led growth leaving the economy trapped

in a classic staples mentality. For coastal communities such as those in Newfoundland and Labrador, Ommer (2007) proposed that a partial solution for restoring the health of coastal ecological systems must come through responsible management, and diversification around the staple base. Such a shift would require some investment in research and development.

2.6.3 The Historical and Economic Context for LED in Newfoundland

To fully understand the potential for LED in rural Newfoundland, one must consider its economy from a historical perspective. Since the European settlers arrived in Newfoundland, the economy and employment have been primarily tied to the development of resources for exporting, fish being the most important one for many rural communities (Mannion, 1977). Prior to Confederation in 1949, fishing activities under a merchant credit system were combined with temporary seasonal employment of other forms such as logging (occupational pluralism), and other subsistence activities (e.g. hunting, gardening, berry picking) for a more self-reliant combination of activities (Newfoundland and Labrador Royal Comission on Employment and Unemployment, 1986).

Following Confederation, subsistence activities were greatly reduced (Ommer & Sinclair, 1999) giving way to a dominant wage-labour industrial economy, including land-based schemes such as mining and lumber mills. Incentives for sustenance activities decreased with the appearance of social safety net programs such as welfare and old age pensions (Ommer, 2002). Since that time, local economies in rural NL were said to be comprised

of three often interdependent spheres; the market sphere, the income supplementation sphere and the household production sphere (House, White & Ripley, 1989).

With respect to the fishery, confederation brought federal fisheries management, and licensing programs that promoted individualistic, rather than community-based thinking (Ommer, 2007). For the better part of the 20th century, the focus was on industrializing the offshore rather than developing the rural seaward economy. As described in Chapter 1, technological changes and misguided fisheries management with relative neglect of local fishery knowledge (Ommer, 2002) resulted in overfishing and eventual depletion of the cod stocks. During the same period, there was a greater focus on inland agriculture and industrial development (the "modern development path"), which has been cited as perhaps not being appropriate given the resources at hand (Ommer, 2002). Industrial projects consisted mainly of "point development" projects such as mining at Buchans, oil refining at Come-by-Chance and construction centered around the Churchill Falls project. These industrial and development projects did not account for the Newfoundland and Labrador's peripheral economic system (Newfoundland and Labrador Royal Commission on Employment and Unemployment, 1986).

Although employment activity relating to the fishery has substantially decreased and outmigration has ensued, the fishery has remained the main economic activity in most rural coastal communities (Schrank, 2005; Roy, 1997; Emery, 1992), making Newfoundland and Labrador one of the Canadian provinces most dependent on seasonal industries (Lysenko and Vodden, 2010). Seasonal unemployment is mainly associated with primary industries along with construction and tourism related sectors. In 2005,

forty percent of seasonal workers in the province are employed in fishing and fish processing (APEC, 2005).

2.6.4 Control and Power in LED

In her discussion of community control of LED, Diochon (2004) referred to exogenous vs. endogenous development, which differ in underlying values. Exogenous theory implies that people need stewardship; best decisions are made on the basis of economic considerations by specialists in centralized locations who can influence the key change factors external to the local and regional economic and social system. She argued that the sanctioning of decisions made by external actors insinuates that internal regional stakeholders are less capable of influencing the development process and iterated that the best outcomes are achieved through endogenous initiative and self-reliance, rather than dependence on exogenously made decisions.

Swack and Mason (1994) also advocated that in order for poor and underdeveloped communities to improve their futures; they need to control the development project itself (managerial control), and they also need to have ownership of their own resources (resource control). Alternatively, when LED projects are externally managed and resources are controlled from the outside, principles of profit maximization and individual interests are more likely to dominate, leaving a community's socio-economic security more vulnerable to external actors and macro-economic forces than in the case of CED.

2.7 Measurement of LED

Many LED studies are conducted using interviews to gather information on the extent to which the development originated at the community-level, on the development process, the nature of the initiatives and their success (Diochon, 2004; Douglas, 1994; Halseth and Halseth, 2004). Records of employment created and other documents can also be collected at the community level and used to substantiate reports of success. Diochon (2004) in a review of regional development policy effectiveness criticized the tendency to determine success by measuring cost-effectiveness or job creation. She stated that a count of jobs created emphasizes outputs, not effect. Without information regarding the type of jobs created, their duration, and whether the people getting them are unemployed or from a disadvantaged group, it is difficult to measure the effect of an initiative. Applying the same performance criteria to all initiatives, irrespective of differences in development contexts, mandates, or objectives, also leads to questionable conclusions.

As such, information on the general economic context, the sustainability of the employment created, the income generated, and whether the initiative employs those in need will be useful in determining LED success. According to Dissart's (2003) international review of research on regional economic diversity, economic diversification has also been suggested to promote a more stable economy and one that has less unemployment. As such, extent of economic diversification could also be an indicator of successful LED.

2.8 The Effect of LED on Community Well-being

Possible ways that LED can influence community well-being are through the creation of employment, income, and job security for residents, which can serve to protect against

the damaging effects of unemployment, lack of income and job insecurity, notably physical and psychological health outcomes along with negative community outcomes of crime and deteriorating physical environment and services. Indeed, psychological damage caused by unemployment has proven to be reversible upon re-employment (Montgomery et al., 1999). Longitudinal data from the U.K. National Child Development Study (the 1958 British cohort) demonstrated that men, having previously exhibited symptoms of depression and anxiety during a period of unemployment, had seen the symptoms reversed after subsequent, potentially positive experiences of employment. In their review of the effects of unemployment on population health, Bartley et al. (1999) examined its effects over the life course. Keeping in mind that some low quality and insecure employment is accompanied by health costs, Bartley et al. (1999) in their review of the link between employment and well-being, concluded that the benefits of relatively stable and secure employment at the individual level include basic biological endowment at birth, the development of physical strength and vitality, cognitive function, psychological capacities such as self-esteem, coping and secure identity, education and work experience (human capital).

At the collective level, the benefits include socially supportive relationships and networks. As noted earlier in the chapter when reviewing the link between loss of income or employment and community well-being, the availability of secure employment and income also allows residents in a community to contribute to any infrastructure or other services provided through taxes. The availability of services and satisfaction with the physical environment are important aspects of community well-being (Christakopoulou et al., 2001; Hancock et al., 1999). Other benefits of increased

employment and income reviewed in this chapter include crime and better healthbehaviours.

It is interesting to note that a search for studies focusing on LED in response to a crisis (economic resilience) and its impact on various aspects of community well-being beyond employment creation reveals that surprisingly little research has been conducted to examine the process and how it might protect against some negative effects of an economic crisis. Much of the literature linking economic position and well-being has focused on the individual level, as described above. However, given the research that has examined the effects of economic decline and benefits of employment and income on health, it stands to reason that the presence or absence of LED when faced with the loss of a major economic resource base can influence employment and income, and community well-being. Figure 2.3 is a representation of the relationship between LED and community well-being and the key concepts identified in the above literature.

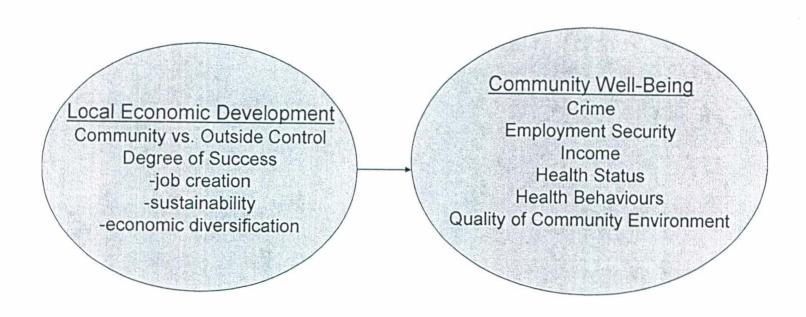


Figure 2.3 Summary of the relationship between LED and dimensions of community well-being as suggested in the literature

2.9 Social Capital as a Social Resilience Process

Social capital, or social networks characterized by trust and norms of reciprocity, volunteering and participation are suggested to influence well-being. They are also suggested to buffer the effects of economic labour-market variables such as unemployment and job insecurity on health.

Mainstream academic interest in social capital can traced to Pierre Bourdieu (1986), though his definition of social capital is relatively underused in the current literature. His was an explicit attempt to understand the production of social classes and class divisions. In preliminary essays, he alluded mainly to social and cultural capital as complements of economic capital, factors that combine to constitute a person's social position, and their

role in facilitating future social participation. He defined it as a possession of people in powerful circles, enabling them to maintain their superior social position (McLean, Schultz & Steger, 2002). He stated that economically privileged individuals have the social position to be able to create social capital (Bourdieu, 1986). Bourdieu and Wacquant (1992) defined social capital as the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition. According to the authors, acknowledging that capital can take a variety of forms is indispensable to explain the structure and dynamics of differentiated societies.

Bourdieu (1986) also described social capital as being "made up of social obligations 'connections', which are convertible, in certain conditions, into economic capital.".

Bourdieu is an important contributor to the study of social capital in his recognition of the role of power and status in social interaction.

During the same period, American sociologist James Coleman (1988), who was interested in social aspects of schooling and scholastic achievement but whose social capital work extended also to other areas, emphasized the productive nature of social capital (p.S98):

Social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors — whether persons or corporate actors — within that structure. Like other forms of capital, social capital is productive, making possible the achievement of certain ends that would not otherwise be possible.

Coleman has also described social capital as an unintentional by-product of activities engaged in for other purposes (Schuller, Baron & Field, 2000). Portes (1998) noted that Coleman's work has included under his definitions of social capital the mechanisms that generate it, the consequences of its possession, and the organizations that provide the context for it to materialize, making it a mechanism or process, but also an outcome. Unlike Bourdieu, whose view of social capital included individualistic motives of the elites, Coleman extended his analysis to non-elite groups, a more egalitarian view of social capital.

The author who has popularized the concept and whose work is cited across a wide range of disciplines today is Robert Putnam. His initial work, published in 1993, consisted of a political-science focused examination of Italian regional government's public policies in which he defined social capital broadly as the features of social organization, such as trust, norms and networks, capable of improving the efficiency of society by facilitating coordinated actions. More particularly, he proposed that Italian regions richer in social capital experienced improved democratic governance, community economic development, and also lower mortality rates. Putnam (1995) defined social capital as features of social life – networks, norms and trust-that enable participants to act together more effectively to pursue shared objectives.

This study was followed by the well-known 2000 publication entitled "Bowling Alone" (Putnam, 2000), in which he proposes a decline in social capital in the United States. He provides bowling as an example of associational activity that not only created recreational networks, but also sustained a wider social fabric, and proposed several detrimental agents to social interaction; growing pressures of time and money (two career

families), geographic changes of communities (suburbanization and sprawl), television and other electronic entertainment, and, most importantly, generational change (the replacement of a civic generation by less involved children and grand-children).

The main dimensions of Putnam's social capital (2000) were described as follows:

- Community networks in the voluntary, state and personal spheres, and the density of networking between these spheres
- Civic engagement or participation in the process of sustaining and/or using such voluntary, state and interpersonal networks
- Civic identity, referring to peoples' sense of belonging to the civic community, together with a sense of solidarity and equality with other community members; and
- Norms governing the functioning of networks, particularly norms of cooperation,
 reciprocity (obligation to help others; confidence that others will help oneself) and
 trust (as opposed to fear) of others in the community.

2.9.1 Types of Social Capital Networks

Edwards and Foley (1998) stated that, when researching the outcomes of social capital, it quickly becomes clear that it is not sufficient to simply describe the size and density of a person's network. The authors suggested that the resources that groups or individuals access through networks is important in examining social capital. The idea of accessing resources through social capital networks is reflected in the following concepts.

Crediting the distinction to Gittel and Vidal, Putnam (2000) distinguished between two types of social capital: "bonding social capital", which typically refers to the relations and

networks between family members, close friends and neighbours, and "bridging social capital", or the building of connections which are outward looking, across social cleavages, which reinforce inclusion among people with generally similar characteristics, or goals (Leonard, 2004; Putnam, 2000; Woolcock, 2000). In research on community-level cooperation, Falk and Kilpatrick (2000) clearly highlighted the importance of ingroup and out-group interactions in social capital. This distinction is reminiscent of Granovetter's (1973) "weak" and "strong" ties. Weak ties consist of acquaintances and various contacts useful to people in terms of getting information, opportunities and jobs, while strong ties such as family and close friends, provided a more intense, multidimensional form of support, particularly affecting well-being.

Woolcock further elaborated on bridging social capital, suggesting that it is a horizontal metaphor, implying connections between people who share broadly similar characteristics. Fox (1996) and Heller (1996) have also observed that social capital can help individuals or groups with lesser means acquire access to political or financial resources to improve their situation. Research in poverty and exclusion has revealed that a key task for development practitioners and policy makers is ensuring that the activities of the poor not only "reach out" but are also "scaled up" by forging connections with individuals in positions of power who have access to resources (Woolcock, 2000).

Woolcock (2000) defined these as "linkages". He defined "linking social capital" as the capacity to leverage resources, ideas and information from formal institutions beyond the community (World Bank, 2000). The concept of linking social capital is used to describe the extent to which an individual or community's networks are characterized by linkage between those with very unequal power and resources, considering it as a vertical bridge

across asymmetrical power and resources (Szreter & Woolcock, 2004). This builds a consideration of power and resources into the concept, and recognizes some exclusionary aspects of it, addressing the criticism that social capital ignores issues of power (DeFillippis, 2001). Aside from collective benefits of linking and other forms of social capital, it has also been recognized that there can be a 'private good' aspect to social capital that can benefit some individuals more than others.

One example which clearly demonstrates the importance of the distinction between differing forms of social capital is the situation in which many poor people find themselves. The poor typically have a close knit and intensive stock of bonding social capital that they leverage to "get by", less of the more diffuse and extensive bridging social capital typically deployed by the non-poor to "get ahead", and almost no linking social capital providing them with access to resources such as those provided by banks, insurance agencies and the courts (World Bank, 2000).

The differing forms of networks will lead to different outcomes (Woolcock, 2000). Similarly, communities affected by an economic crisis may not only rely on internal networks for support, but may network with similar others or individuals in positions of power to improve their situation. As such, social capital can be viewed as a resilience process. Dale and Onyx (2005) proposed that vulnerable rural communities that have suffered population losses may have the advantage of potentially high levels of bonding social capital, creating the possibility for collective action. However, Dale and Onyx suggested that their economic survival will be dependent on their access to resources, and particularly on their bridging and linking social capital, used to draw on outside resources of expertise and financial capital.

2.9.2 Common Ground with Other Community Concepts

Campbell and Jovchelovitch (2000) underlined the relatedness of social capital to other community and social psychology concepts, notably community empowerment, sense of community, community competence, community capacity and collective efficacy. This overlap suggests that such concepts for which measures previously exist may be used in social capital research. In fact, community and social psychology researchers have begun to explore some of these as predictors and even indicators of social capital (Perkins & Long, 2002; Pooley, Cohen & Pike, 2005).

Sense of community (SOC) or "a feeling that members have of belonging and being important to each other, and a shared faith that members' needs will be met by the commitment to be together" (Chavis, Hogge, McMillan & Wandersman, 1986) has been suggested as a concept useful for studying social capital (Perkins & Long, 2002; Pooley, Cohen & Pike, 2005). Through the use of case studies, Pooley, Cohen & Pike (2005) suggested that McMillan and Chavis' (1986) four dimensions of SOC are appropriate benchmarks for studying social capital; sense of membership or belonging to a group; influence between the community and its members; integration and fulfillment of needs; and shared emotional connections, which includes quality of interaction between members.

Perkins and Long (2002) studied social capital in inner-city neighbourhoods using timeseries survey data that incorporated community psychology concepts. The four proposed aspects of social capital were SOC (individual and community-level measures), collective efficacy or trust in the effectiveness of organized community action, neighbouring behaviours (neighbourly behaviours of informal mutual assistance and information sharing among neighbours), and extent of participation in community groups and events. Results of the study also suggest that cognitions such as community confidence (belief that things have been improving and will continue to do so), communitarianism (the worth given to one's community as well as a commitment to collective community improvement) and place attachment (emotional bonds to a community) could predict some aspects of social capital. The findings lent support to the model and suggested that community or social psychology concepts such as community confidence may add to our understanding of the underlying beliefs or motivations present in social capital.

Perkins, Hughley and Speer (2002) proposed that the primary reason for community psychologists' relative inattention to social capital was the focus on context (networks and organizations) adopted by the disciplines of origin (sociology, political science) with less emphasis on individuals, whereas community psychology focuses on individuals in the context of groups, organizations, communities, etc. The authors proposed the study of social capital at an individual level, as in Perkins and Long (2002) and at the community level, and called for a collaboration between disciplines.

Several years later, Long and Perkins (2007) re-tested their four-component social capital model by including individual and group/community measures before and after a one-year lag. Results lent support to the importance of all four variables in predicting future behaviours and cognitions relating to social capital, either at the individual or community levels. However, the authors found that in neighbourhood conditions of low resources/affluence, high place attachment can lead to low SOC and participation – in such circumstances, being attached to one's place may exacerbate feelings of social isolation. The authors further suggested that although they had likened SOC to

cognitions reflecting bonding or informal social capital, the conceptualization of social capital should be expanded to include other types of cognitions. The authors concluded that the study of social capital should continue to incorporate individual psychological components but should also examine behaviour, power and resources of whole networks and institutions utilizing other methods and disciplinary perspectives.

2.10 Measurement of Social Capital

When exploring social capital networks and their activities as resilience processes, one must take into account the size and density of the networks, associational (Wall et al., 2004) or volunteer activity (Putnam, 2000) but also whether they link people within a community or beyond it (bridging, bonding and linking social capital) (Putnam 2004; Woolcock, 2000), and the types of activities which they support. The role of community or social psychology constructs (Perkins & Long, 2002) and their importance for social capital needs to be further refined. Conceptualizations that are ultimately favoured will depend not on theoretical elegance, but rather on the extent to which they provide useful heuristics for research and policy, and on their ability to explain the regularly occurring research evidence. Increased analysis of individual/psychological constructs should be complemented by the study of networks and institutions at the community level.

The literature on social capital suggests that it is related to several aspects of community well-being, such as health status, crime, getting involved in community planning and decision-making, and sense of community. The following is a brief review of that evidence.

2.11 Social Capital and Community Well-being

Social networks are found to lead to positive community well-being outcomes (Baum, 2002; Kawachi, Kennedy, Lochner & Prothrow-Stith 1997). The following outlines the effects of social capital on several dimensions of community well-being; psychological health, physical health, health behaviour, crime; place attachment/sense of community and community development outcomes.

2.11.1 Social Capital, Social Support and Health

Research on the psychosocial risk factors for poor health has identified many that appear to be influenced by an individual's social circumstance; isolation, lack of social support, levels of civic engagement, low self-esteem, high self-blame and low perceived power (Stansfeld, 1992). Of these, social support is the major psychosocial risk factor for which there is a substantial amount of evidence. These social supports or social networks can be characterized by the number of people in them but also by the quality of support received from them (Baum, 2002). Baum (2002) and Berkman and Kawachi (2000) have argued that social support occurs between individuals and can also be examined at a communal and societal level, thus health benefits of social support for example from family and friends can also be described as health benefits of bonding social capital. As such, the evidence presented below for the health benefits of social supports is included as it is likened to bonding social capital.

There has been some suggestion that the most positive impact of social capital ties is in the area of psychological health. Sociologist Emile Durkheim (1951) long ago proposed a close positive relationship between suicide and the degree to which individuals are integrated into society. The effect was attributed to weak social connectedness

experienced by people who are not married, isolated in the wintertime, or members of the Catholic faith, who were found to be less integrated than Protestants.

Brown and Harris (1978) found that the presence of a partner to confide in acts as a buffer to mental distress following a major life event; the partner's presence decreased the likelihood of developing depression by four times. Happiness has been higher in married people but also (though the effect is slightly less) for other types of social connectivity like going to church or being a member of voluntary associations (Argyle, 1987; Helliwell, 2002).

Harris, Brown and Robinson (1999) found that social integration in the form of befriending was helpful in alleviating chronic depression among women. There also exists evidence that networks and social participation protect against dementia or cognitive decline over the age of 65 years (Fabrigoule, et al., 1995). Baum, et al.(2000) found that people less socially isolated and more involved in social and civic activities tend to have better functional mental health.

In reviewing the above literature, it appears that the 'social support' that typically results from close networks (family and friends within a community) also described as bonding social capital is perhaps most relevant to individual psychological health. In effect, community or societal level ecological health effects of networks have also been studied (Berkman & Kawachi, 2000). Dense social networks have also been found to have health protective qualities (Halpern, 1993; Prickett & Wilkinson, 2008). This line of research suggests that the proximity of social networks (as commonly described in bonding social capital research) is associated with higher levels of social and emotional support and less

mental illness. In cases of minorities or concentrated disadvantage, this was explained as a sheltering effect from the direct discrimination from wider groups (Halpern, 1993).

Utilizing the results of U.S. and Canadian national surveys, Helliwell and Putnam (2004) concluded that social capital represented by survey measures of marriage and family, ties to friends and neighbours, workplace ties, civic engagement, trustworthiness and trust were all independently and robustly related to happiness and life satisfaction (indicators of psychological health) as well as self-rated health. Though the study was limited in its selection of social capital measures (a combination of pre-existing survey measures) and could not infer causality due to the methodological limitations of cross-sectional surveys, the strength of the patterns observed provided some support for the theoretical link.

In terms of recent research relevant to rural areas and the challenges they face, highly developed social networks were cited as one of the main reasons for low stress levels in Canadian coastal communities that sustained extensive employment and population declines (Ommer, 2007). Regression modelling of survey data also determined that social capital and cohesion were strong predictors of emotional health.

With respect to physical health, supportive relationships play a protective role. One of classic study was the Alameda County Study, showing that individuals with weak social ties at the beginning of the study were 1.9 to 3.1 times more likely to die (of heart disease, circulatory disease, cancer and an "any other cause" category) during the study period than those with more social contacts, after controlling for health behaviours, physical activity, preventative health care, and a range of baseline health measures (Berkman & Syme, 1979).

The research is particularly strong when linking social network support to mortality rates relating to strokes, heart disease, and suicide (Berkman & Syme, 1979; House, Landis & Umberson, 1988; Kennedy, Kawachi., Lochner, & Prothrow-Stith, 1997; Ross & Huber, 1985; Schoenback, Kaplan et al., 1985). According to Berkman and Glass (2000), over the previous 20 years, 13 large prospective cohort studies across a number of countries from the United States to Scandinavian countries to Japan have been conducted that show that people who are isolated or disconnected from others are at increased risk of dying prematurely.

Emotionally supportive social environment and the qualities of social organization were found to be protective against myocardial infarction (Bruhn and Wolf, 1979). In spite of being similar to the other communities in primary risk factors, from 1955 to 1965 residents of the Italian immigrant community of Roseto Pennsylvania had a strikingly low mortality rate from myocardial infarctions. Researchers were struck by the egalitarian culture that could be observed there such as family-centred social life, absence of ostentation even among the wealthy, nearly exclusive patronage of local business and a predominance of intra-ethnic marriages. In 1963, upon interviewing Rosetan youth, the investigators concluded that teens were largely prepared to abandon the social norms of the community in favour of less egalitarian and cohesive, and more materialistic American values and behaviours. Investigators predicted that the change in community values would lead to a loss of the health protective factor. By the 1970s, myocardial infarctions were actually higher than for neighbouring towns (Bruhn & Wolf, 1979). Years later, in a related study, Egolf, Lasker, Wolf and Potvin (1992) extended the comparison of death records from 1935 to 1985, revealing that mortality due to

myocardial infarctions in Roseto was statistically significantly lower in the 30 years prior to 1965, whereas the effect disappeared for the following 20 year period. Since then, community-level social networks have been shown to protect against heart disease in many other studies in England, Chicago and Texas (Haplern, 2005). These neighbourhood effects were not huge (5 to 10 % of the variability explained) but they were striking and supported the role of community networks in health protection.

Using interviews, Campbell, Wood and Kelly (1999) explored differences in social capital between a 'high-health' and a 'low-health' community. Through the use of focus groups and interviews, they explored Putnam's characteristics of social capital; the existence of community networks, civic engagement (participation in those networks), local identity or a sense of solidarity and equality with other residents, and norms of trust and reciprocal help and support. Specifically, they asked residents about local identity and belongingness, help and support, trust, engagement, belief in the power of citizens to participate in local decision-making, and the availability of local formal and informal group memberships. The 'high-health' community reported greater civic engagement (participation in sustaining or using voluntary, state and interpersonal networks) and trust in neighbours, while the 'low-health' community reported greater civic identity (sense of 'belonging' to the civic community, together with a sense of solidarity and equality with other community members). Though some community-based organizations were present in the 'low-health' community, residents reported experiencing them as passive clients rather than active participants. They did not see themselves as represented by those organizations, as they were not a part of their implementation and regulation. The authors suggested this greater civic identity or local attachment found in the 'low-health'

community reflected their geographically restricted social ties. They argued that the close-to-home strong networks are commonly found in unemployed, less healthy populations. Conversely, the less locally based networks of the high health community were hypothesized to reflect health enhancing characteristics of geographically broad social networks, said to lead to greater employment opportunities. These findings are consistent with the concept of linking social capital previously described, but did not lend strong support to Putnam's (2000) conceptualization of social capital.

2.11.2 Social Capital and Crime

Some research has suggested that social disorganization, or lack of social capital, leads to more crime (Halpern, 2001; OECD, 2001; Sampson, Raudenbush & Earls, 1997).

Sampson and colleagues found that social capital as measured by collective efficacy was strongly and negatively associated with violent crime, even when controlling for socioeconomic status and previous experiences with crime. Another example is the success of Neighborhood Watch schemes as crime-reduction strategies in neighbourhoods high in pre-existing social capital (Halpern, 2005).

Putnam (2000) and Reiss (1986) observed that the presence of many stable families in a neighbourhood is associated with lower levels of youth lawbreaking. Thus the presence of 'good families' has a ripple effect by increasing the pool of 'good peers' that other families' kids can be friend. This social cohesion would result in less crime. This line of thought is consistent with the previously discussed social control theory of crime (Hirschi, 1969), whereby individuals engage in criminal acts in the absence of positive relationships with conventional others and institutions. That is, people who engage with others who internalize more 'conventional values' are less likely to commit crimes.

Similarly, the notion of negative social influence has been employed to explain delinquency and violent crimes. These have been modeled after contagious diseases such as AIDS (Wallace & Wallace, 1997). According to this model, youth troublemaking is like a communicable disease that spreads through high schools and friendship groups. This contagious model of criminal behaviour is more consistent with the social learning theory of crime (Burton, Cullen, Evans & Dunaway, 1994), whereby criminal acts are influenced by positive relationships with deviant others. This effect has also been referred to as negative social capital, where strong bonds between delinquents and their peers encourage more delinquent behaviours.

Putnam (2000) suggested that stable families provide the vaccines that reduce the number of contagious kids capable of infecting others. This view was supported by the observation of juvenile gang-related crime in the absence of alternative strong forms of positive social capital at the broader community level (Scott, 1993). Neighbourhoods that were 'high-risk' in crime were also characterized by low social cohesion, and had more permeable boundaries, major thoroughfares, more public parking and vacant land. The question is whether social cohesion contributes to the risk or is a result of it. A study by Saegert and Winkel (2004) suggested both are possible. The project examined reactions to crime in two different inner-city building complexes. Findings suggested that crime had a chilling rather than an energizing effect on community participation. However, social capital was more strongly and consistently related to participation in community organizations than was crime. An interesting finding in the study was that having small children encouraged participation, most likely because the children help adults get to know one another. Personal disadvantages made social capital building

more difficult. Higher social capital in these types of settings is associated to better crime prevention (Saegert, Winkel & Swartz, 2002). As stated previously, crime has been suggested as a possible adverse effect of declining social capital in communities adversely affected by an economic crisis in rural Newfoundland (Fowler, 2001).

2.11.3 Social Capital and Place Attachment

As seen previously in the section describing dimensions of community well-being, Christakopoulou, Dawson and Gari (2001) proposed 'place attachment' as indicators of social functioning, an important dimension of community well-being. McMillan and Chavis (1986), who contributed to the development of the concept, described it as "a feeling that members have of belonging, a feeling that members matter to one another and to the group and a shared faith that the members' needs will be met through their commitment to be together" (pg. 9). Christakopoulou et al. (2001) argued its importance for being inversely linked to feelings of loneliness and alienation, loss of local autonomy and reduced personal involvement in the local community. The definition overlaps with the concept of social capital. As previously stated in this chapter, SOC, which includes a place attachment dimension, has also been suggested as an indicator of social capital (Long & Perkins, 2003; Long & Perkins, 2007; Perkins & Long, 2002; Pooley, Cohen & Pike, 2005). This suggests that social capital is not only a process that can lead to improved well-being but also a well-being indicator in and of itself.

Residential satisfaction, another concept which has been described as a dimension of community well-being (Christakopoulou, 2001), has been found to be affected more by getting along with your neighbours than by the physical quality of the dwelling (Bowling, Bannister, Sutton, Evans & Windsor, 2002).

2.11.4 Social Capital and Community Development for Community Well-being

One could argue that community development work, whether it is in relation to health promotion, the provision of social services otherwise not available (e.g., food banks, etc.) or other types of community improvement projects (such as community ownership of halls and community centres which act as spaces for interaction, etc.), is important for community well-being. Social capital, once again, is purported as one of the key ingredients for the success of such initiatives, which are often limited in resources and heavily rely on community volunteers (Campbell, 2000; Kay, 2005; Lomas, 1998). This aspect of social capital seems to emphasize its productive characteristic. That is, some ends can be achieved with the use of social networks that would not otherwise be possible.

Some examples where social capital enhanced or enabled community development are in the area of health promotion. For example, Lomas' (1998) study of social versus individual intervention using key-informant interviews revealed the paramount role of social capital networks is two-fold. Not only does it facilitate reaching participants through networks at the community level but also it is also critical for mobilizing volunteers at the organizational level, where the success of health promotion initiatives can be enhanced by the quality of exchanges and strength of networks between volunteers. Campbell (2000) cited the Healthy Cities Movement, which focuses on transforming the social structures that foster ill-health through community participation characterized by community ownership, effective committees and intersectoral collaboration supported by a wide range of health promotion representatives as well as local and national policies. Campbell (2000) claimed that the emphasis of community

networks and participation in the Healthy Cities Movement resonates strongly with social capital theory.

With respect to research conducted in rural areas, Kay (2005) examined the contribution of social capital in all its forms to community development as part of the CONSCISE Project, which was a three-year research exercise (2000-2003) looking at the contribution of social capital and the social economy to local economic development in Western Europe'. Social enterprises were said to be not for profit entities that provided paid and non-paid work and offered advice and supports to the self-employed. These activities supported/complemented the functioning of the community along with public services and private businesses. Trust and a sense of belonging were found to be very important to the work of the social enterprises. Social capital across all spheres was said to reduce transaction costs (e.g. mutual understanding versus formal contracts). The researchers found bonding, bridging and linking social capital all comprised important pieces of the community development puzzle. One can assert that community development activities can benefit from all types of social networks, whether bonding with other community members, bridging with similar others outside the community or linking with individuals who can provide access to the necessary resources for community development activities to succeed. Based on the findings of the study, the researchers built their own definition of social capital with three main components:

 trust, social networks and reciprocity/mutuality are about relationships between individuals and organizations;

- shared norms of behaviour and shared commitment and belonging are about more than one individual and/or organization sharing values, sharing a way of thinking; and,
- effective information channels to access information from outside and within their community.

Onyx and Osburn (2005) studied social capital and community development in a declining Australian mining town. The town utilized volunteer resources as well as donations obtained from businesses and government grants to establish a community centre, which provided a focal point and a meeting space for more targeted solution groups aimed at developing several initiatives such as a community garden and market, a group aimed at employment and men's issues, a group in charge of acquiring government grants to use solar energy for the centre, an olive tree group dedicated to using previously unused olive trees for the production and sale of olive oil (a cooperative was later formed) and other solution oriented groups.

Though the solution groups were initially successful at attracting a broad variety of community participants, some felt silenced by the process. Roundtables were intended to generate self-initiated action, drawing on principles of participatory democracy. Through their networks with business owners and government organizations, participants were able to access funding for several initiatives. However, key problems included decision-making processes and location of control within the solution groups. For some groups, lack of leadership resulted in inaction with each member taking the attitude that "someone should do something", while in other groups, struggles of authority prevented projects from moving forward. Though the solution groups were for the most part, not

aimed at creating employment opportunities, some did. The use of social capital for creating local economic employment opportunities will be the focus of the following section.

2.11.5 Social Capital in the Hierarchy of Needs

A study of Newfoundland communities in their adaptation to the fishery crisis demonstrated that social capital existed beyond individuals and their interactions. However, the study revealed that in a situation of economic crisis, the desire to associate and work together with other community members was surpassed by the immediacy of responding to the needs of their own families (Fowler & Etchegary, 2008). The research pointed to the damaging effects of community out-migration on social capital. This research supported the dynamic quality of social capital; the fact that it is impacted by community events is just as important as its ability to affect community health outcomes. In summary, social capital appears to have been associated to several dimensions of community well-being, as outlined in Figure 2.4. However, as previously stated (Kulig, 2000; Fowler, 2008), its dynamic nature also implies that the outcomes of social interactions can influence the future functioning of social networks.

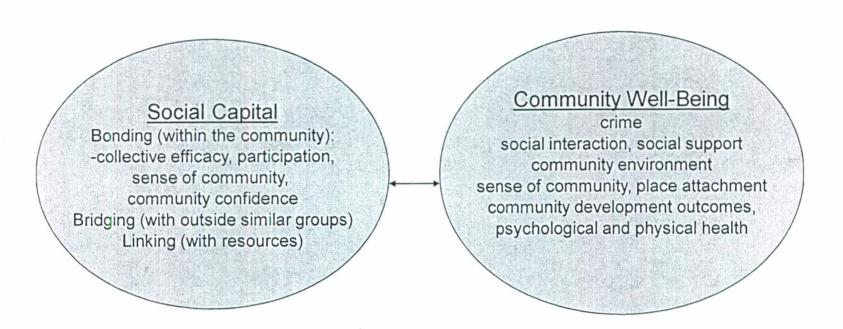


Figure 2.4 Summary of the relationships between social capital and dimensions of community well-being as represented in the literature

The literature presented has informed questions as to whether LED and social capital are processes that can enhance community well-being in areas of rural Newfoundland affected by the economic crisis. The final question was whether there exists a relationship between the social and economic resilience processes proposed to mediate the relationship between economic crisis and community well-being. The following section will review literature as it pertains to that relationship.

2.12 The Relationship between Social Capital and LED

Research on the facilitators of LED suggests that various manifestations of social capital support the achievement of LED goals. Examples of this include networks between businesses and not-for-profit associations such as cooperatives, business clusters or networks between businesses with common characteristics and networks within

(bonding) and outside (bridging and linking) the community. These examples and others are discussed below.

Even in cases of economic hardship, there is some evidence that communities can turn themselves around, often to the credit of supportive community networks and exceptional leadership, instigating a cultural change (Halpern, 2005). For example, in Tupelo Mississipi, a local newspaper proprietor persuaded local business leaders to pool their resources to buy a siring bull, which led to a lucrative dairy industry and the replacement of the local Chamber of Commerce by a less hierarchical and more co-operative Community Development Foundation (Halpern, 2005). Such associations have been shown to positively impact economic development. Micro-enterprise lending circles and community development credit unions are a great example of how organizations can act as focal points for social networks to come together and have the power to make lending decisions, allowing members to realize otherwise unattainable capital (Defilippis, 2001).

Conversely, there has been some conflicting evidence concerning the effectiveness of associations for promoting economic development. In some cases, great amounts of social capital produced by such organizations are accompanied by limited improvements in economic development, as in the case of American Community Development Corporations of the '60s (Defilipis, 2001). In studying the role of associations in economic development, the use of methods which distinguish between the types of social capital and take into account other influential variables will enable us to better understand mixed findings in this area. Using a mix of quantitative and qualitative methods, Wall, Connell and Fuller (2004) found that the number of volunteer or not-for-profit associations (described as "structural aspects of social capital) were less predictive of

rural economic development in Canada than social capital as described by residents in qualitative interviews. Qualitative data obtained through interviews was more revealing of the types of associational activities and networks (social capital) that were more focused toward the achievement of economic development goals.

Regional cooperation of business clusters are another example of economic benefits of social capital. When firms cooperate in clusters formed of strategic networks, they benefit from knowledge exchange, even by developing joint products and marketing, and local spill-over effects ensue, setting up the conditions for a creative mix of local cooperation and competition, as seen in Dawe's (2004) example of local products jointly promoted in a strongly co-operative culture in peripheral and rural Orkney, Scotland, creating competitive advantage in changing global markets. This type of social capital consists of bridging across firms but also linking with associations that bring them together, to access policy makers that can offer resources or even simply to express views on upcoming policy issues such as the tax environment in which the firms will operate. Linking and bridging are also extremely important for gaining knowledge of trends outside the cluster, maintaining its competitive edge in global markets and preventing its' stagnation or inability to survive (Molina-Morales, Lopez-Navarro & Guia-Julve, 2002).

Flora, Sharp, Flora and Newlon (1997) have developed a theory of entrepreneurial social infrastructure as promoting change or collective action. Entrepreneurial social infrastructure is comprised of linkages to other communities, horizontal and vertical networks, ability to be involved in community decision-making, perceived legitimacy of available alternative courses of action, access to capital from local financial institutions, and mobilization within the community (e.g., volunteering, and the availability of other

public resources). As such, entrepreneurial social infrastructure includes core aspects of social capital as reflected by Putnam; networks within and outside the community, and productive aspects of social capital as reflected by Bourdieu and Coleman; degree of mobilization within the community and a belief in the effectiveness of community action. Flora et al. (1997) found that non-metropolitan localities scoring high on entrepreneurial social infrastructure measures were more successful at implementing economic development projects or collective economic development action.

Italian (Helliwell & Putnam, 1995) and American (Florida, Cushing & Gates, 2002) national studies which compare regions support the community-level conclusions that cohesion and trust are important (bonding social capital) but that sustained success also depends on the presence of diverse and open interactions (bridging and linking social capital).

Within an organization, high bonding social capital contributes to better member satisfaction (or job satisfaction), reinforces member commitment and reduces turnover (Podolny & Baron, 1997).

As seen in this section, there is some research that suggests that in some cases social capital networks (bonding, bridging and linking) can mobilize participation within organizations and facilitate access to outside collaborations and resources in LED. The possible relationship between social capital and LED is depicted in Figure 2.5.

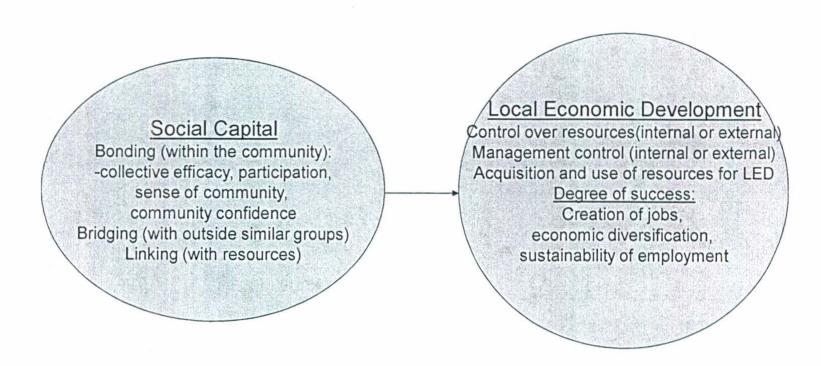


Figure 2.5 Summary of the relationships between social capital and LED as suggested in the reviewed literature

Overview of Chapter 2

- The goal of the chapter was to review literature relevant to community adjustment
 after an economic crisis and the social and economic resilience processes capable
 of mediating the impacts on community well-being.
- The concept of community well-being is often described as the social, political, economic and cultural dimensions of community life that enable well-being of its residents. Key dimensions of community well-being include health, education, place attachment, community spirit, safety, decision-making processes, youth involvement, income sufficiency, satisfaction with services and facilities, and physical environment.

- A community economic crisis can negatively influence various dimensions of community well-being through loss of income and employment, increases in crime, and decreases in the quality of services.
- Community resilience has been described as a process whereby communities
 utilize their social and economic capacities/resources to adapt or respond to a
 crisis for improved well-being.
- Social capital (social networks and norms of reciprocity) was suggested as a social resilience process capable of influencing community well-being.

 Conceptualizations of social capital need to distinguish between various types of social capital; bonding, bridging and linking. Other community or social psychological concepts such as community confidence or community efficacy have been suggested as relevant antecedents of, or contributors to social capital.

 Sense of Community (SOC) and related sub-elements have been proposed as indicators of social capital. Research has shown that social capital can influence many domains of community well-being directly as in the case of health, crime, place attachment and residential satisfaction, and through community development activities in the areas of recreation, health promotion, economic development, etc.
- LED was proposed as an economic resilience process capable of influencing well-being by creating employment opportunities in communities affected by an economic crisis. The Newfoundland rural economy has historically been dependent on primary industries and related exports, and its vast geography (distance from markets) present competitive disadvantages. Initiatives that are

locally controlled are proposed as most effective and sustainable, and are generally less vulnerable to outside interests.

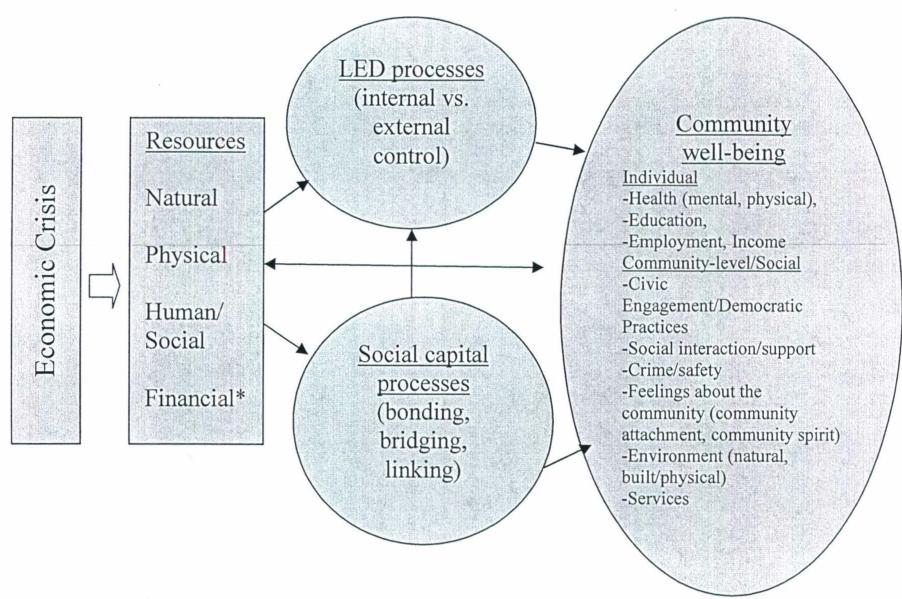
Social capital can also be useful in the development of economic opportunities
either through not-for-profit associations, networks between local business or
networks within and outside the community.

Chapter 3: Analytical Framework, Research Design and Methods

The present chapter outlines the analytical framework or model developed from the preceding literature review. The research design is described as taking place in two phases. Phase one involved the selection of the communities for further case study based primarily on indicators of geographic isolation, basic demographics, and extent of local economic development. Phase two was the more detailed case study of the two selected communities through a mixed methods approach. The description of the research design is followed by an outline of methods employed in both phases. Finally, there is an outline of participants and procedure for each method, including procedures used to obtain informed consent from participants along with an explanation of the analyses undertaken.

3.1 Analytical Framework/Model

The literature presented in the previous chapter examined the possible relationships between social capital, LED, and community well-being. The following model (see Figure 3.1) represents the relationships described in the previous chapter. The model proposes that the relationship between economic crisis and a myriad of community well-being indicators/dimensions is mediated by resilience or adjustment processes that can engage community resources to produce development, specifically within rural communities disadvantaged by an economic crisis. Social capital, or networks and participation, and the development of economic opportunities can influence community well-being.



^{*}Financial resources are thought of as a necessary part of combining and mobilizing other types of resources.

Figure 3.1 Resilience processes that mediate the relationship between economic crisis and community well-being

When considering social capital processes, one must account for qualities of the social networks and the nature of their activities. As reviewed in the previous chapter, social capital processes are capable of influencing both the development of economic opportunities by mobilizing people and resources and it is capable of influencing community well-being more directly, through the health benefits of social support, by fostering place attachment or a sense of belonging, and indirectly through community development activities. For their part, LED processes are capable of creating sustainable and diversifying employment opportunities to offset the job losses incurred during the economic crisis. Note that the model does not suggest linear relationships between the constructs, but recognizes that the concepts are dynamic and interactive. For example,

some indicators of well-being such as health status will influence the human resources that are drawn upon in economic and social resilience processes.

As described in Chapter 1, the two aims of the study were to explore impacts of the economic crisis using a broader conceptualization of well-being and to explore the variability in well-being between communities by examining their resilience processes. From these aims and the above conceptual model, three major research questions were derived to guide the study:

- What is the character of the community well-being of certain communities impacted by cod moratorium of the early 1990s?
- What is the impact of certain social and economic resilience processes (specifically LED and social capital) on community well-being?
- What is the nature of the relationship between social capital and LED?

3.2 Investigative Approach

The methodological approach for studying the three research questions consisted of mixed method case studies of two communities in rural Newfoundland that had experienced economic decline due to the fishery moratorium; one that had subsequently sustained some economic recovery and one that had not. Case studies using multiple methods are appropriate when researchers must a) define topics of study broadly, b) cover contextual or complex, multivariate conditions and not just isolated variables, and c) rely on multiple and not single sources of evidence (Yin, 2003). This study satisfies all three conditions. Case studies have been utilized to assess community processes (Yin, 2003) in the areas of resilience for sustainable community development (Folke et al., 2002), community resilience processes (Kulig, 2000) and social capital for community

development (Gittel & Vidal, 1998) making them particularly relevant for this type of project. Though the findings of community case studies cannot be generalized, the methods supported an in-depth exploration of the community-level phenomena at play and further informed our understanding of community resilience.

The case study methods included interviews with leaders and residents, ethnographic observation and participation, questionnaire surveys conducted with residents and the use of government statistics. Utilization of multiple methods adds strength and credibility to the study of complex social phenomenon in natural settings through triangulation and complementarity (Westhues et al., 2008). Triangulation accomplishes this by first analyzing the data distinctively and then seeking convergence and correspondence of the results across the different methods. Complementarity is achieved when results from one method are used to enhance, illustrate and clarify results from the others. Another beneficial characteristic of the project was the pluralism and diversity of guiding perspectives.

Academic supervisors from a variety of backgrounds (community health, sociology, economics) provided feedback at each stage of analysis in a setting whereby the various members exchanged their points of view, increasing the commitment to diverse ways of knowing and communicative validity (Kvale, 1995). The case studies shed light on resilience processes and their impact on community well-being, as described in more detail below.

3.3 Research Design and Methods

The research design included two phases (see Figure 3.2). The first phase was an examination of statistical and geographical data on communities that were negatively affected by the fishery moratorium of the early 1990s, with the purpose of selecting two communities for further case study. Once these communities were chosen, the second phase of the project began – community case studies. A combination of qualitative and quantitative methods was used to investigate the relationships between social and economic resilience processes, and community well-being.

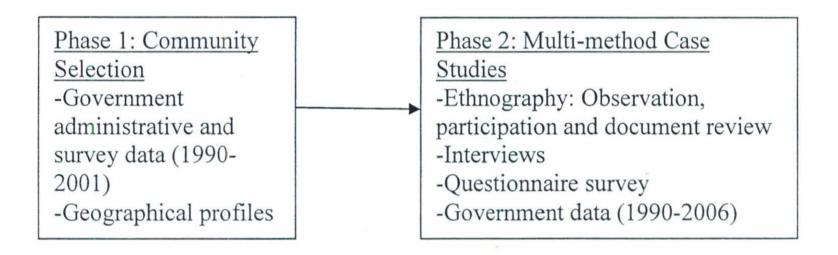


Figure 3.2 Research design

3.3.1 Phase 1: Community Selection

The purpose of this phase was to select a pair of communities similar in geographic distance from a regional centre (of equal distance to services, banking, etc.) and demographic profile just before the cod moratorium and extent of fishery dependency at that point. In addition, the aim was also to select two communities that differed in economic recovery (based on employment recovery) since the fishery decline. The

following is a description of the data sources that were used in the community selection phase.

Geographic plots were obtained from the GIS Laboratory at Memorial University for all communities highly dependent on the fishery in Newfoundland (based on receipt of fishery assistance programming), obtained from the Decade of Change study (Murray et al, 2006). Through the utilization of these plots and data it was possible to identify four pairs of communities each comprised of two communities similar in geographic isolation (distance from the same major centre). For the four pairs of communities, a range of data sources was consulted.

Communities determined to have been heavily impacted by the fishery closure were identified by the assistance they received in government support through The Atlantic Groundfish Strategy program (TAGS) and the Northern Cod Adjustment and Recovery Program (NCARP). These data were kept by Newfoundland and Labrador Statistics Agency (Department of Finance, Government of Newfoundland and Labrador).

The communities selected were similar in demographic variables such as age profiles and population change. The demographic data used in the Decade of Change study on which this community selection is based was Statistics Canada's census data. Released every five years, these data contain various demographic, socio-demographic and socio-economic measures for census subdivisions (CSDs) representing specific communities considered for further study.

For each pair of selected communities, tax filer employment data from 1992 to 2001 available through Community Accounts (Department of Statistics and Finance,

Government of Newfoundland and Labrador, 2005) were used to calculate an Employment Elasticity ratio (May, 2005) in order to determine the extent of employment recovered by 2001 since the community's lowest point of employment in1990s. The employment elasticity indicator was considered an important indicator of economic success.

Data on new businesses were obtained through the Decade of Change Study include the Statistics Canada Business Register (1991, 2001), informed by Canada's economic surveys and Canada Customs and Revenue Agency's Business Number account files (Murray et al., 2006).

Community Accounts data were also used to obtain a measure of community receipt of government transfer incomes such as Employment Insurance, Social Assistance, Canada Pension Plan and Old Age Security. From this data, an index of community self-reliance was calculated, which described the extent to which the community relied on employment and other market incomes versus government transfers.

Details of the process of selection of the pair of communities examined are provided in Chapter 4.

3.3.2 Phase 2: Mixed-Method Case Studies

The case studies included a mix of qualitative and quantitative methods. The following is a description of the methods used.

3.3.2.1 Ethnography

In order to gain an understanding of community culture, social activities and processes, economic development processes and community well-being in general, ethnographic methods were employed. Ethnography is the comparative, descriptive analysis of the everyday, of what is taken for granted (Toren, 1996). Ethnography generally signifies spending long periods watching people, coupled with talking to them about what they are doing, thinking and saying, designed to see how they understand their world.

Observation has the benefit of not being mediated by a respondent's personal judgment regarding what should and should not be discussed. Sometimes actions speak louder than words and some actions are difficult to convey in words, precisely because they are so meaningful (Weinberg, 2002). Hughes (1970) notes also the utility of observational fieldwork for both informing the design of larger sample surveys and empirically grounding theoretical observations of statistical variations. The ethnographic and observational information was also used to identify potential key informants for further interviewing.

3.3.2.2 Document Review

In order to gain insight on the history and culture of each community, documents written by community members and / or about the communities were collected and reviewed. These documents provided some context for studying social capital, local economic development and community health in the two communities. Collecting historic and other available documentation on the object of fieldwork (in this case rural communities) is common practice in most ethnographic fieldwork (Delamont, 2004). Putnam (1995) emphasized that social capital must be understood historically since networks of civic engagement represent past collaborative successes which serve as a 'cultural template' for future collaboration. These sources supplemented other data collection methods such as observations and interviewing.

3.3.2.3 Key Informant Interviews

Interviews have been useful in learning about the nature of social capital in previous research (Campbell et al., 1999; Fowler, 2001; Pooley, Cohen & Pike; 2005). Semi-structured interviews were conducted with key informants (community leaders and other town residents), funding partners and other government agency representatives who worked with residents were also interviewed to gain insights on the following themes (see interview guide – Appendix 3-A).

- Community history and present day (economy, people, social, well-being)
- Community engagement in planning for initiatives
- Involvement of external resources for initiatives
- Partnerships (toward LED and other community development activities) and volunteering; and
- Future outlook

While all interviewees were interviewed on all themes, residents were also asked questions about the social and economic history of the communities, present community life and well-being, social interaction, volunteering, community initiatives and outlook on the future. Government representatives were also asked questions about networking processes that led to the collaboration with community members, their general perception of the communities and experiences of working with each community.

3.3.2.4 Questionnaire Survey

A questionnaire survey of community residents was used to gather information about community well-being and social capital. The following is a description of the community well-being questionnaire content, followed by the social capital content.

a) Community Well-Being Questionnaire Survey Content

The part of the survey instrument which assessed community well-being consisted of five major components;

- General assessment of community well-being
- Community Well-Being Questionnaire (described below) complemented by a
 question about crime and employment availability in the community
- Individual educational achievement
- Household income and individual employment status
- Individual health status questions taken from the Newfoundland and Labrador Adult Health Survey (NLAHS) and the Canadian Community Health Survey (CCHS)
- Open ended question about the community

These five major components are further described as follows:

General Community Well-Being Item

There was a general, an item asking participants to rate the well-being of community residents as excellent, very good, good, fair or poor.

The Community Well-Being Questionnaire (CWBQ) Items

Many survey items utilized in measuring community well-being were taken from the CWBQ and its subscales Christakopoulou, et al., (2001), which has undergone extensive psychometric testing in Greece, Ireland and the United Kingdom. The questionnaire subscales tested well when subjected to Cronbach's Alpha measures of internal consistency. The results of a factor analysis confirmed the expected relatedness between some subscales and the expected factor structure. To test construct validity, each subscale was correlated to a face-value valid item measuring the construct or another subscale measuring a similar construct (ex: community spirit and informal interaction). Income measures were correlated with reported household incomes. All correlations were significant and in the expected directions. Test-retest correlations for reliability were also very high (above r=0.78) (Christakopoulou et al., 2001).

The CWBQ contains nine sub-scales for a total of 44 7-point scale items. These sub-scales are:

Rating: Strongly disagree to strongly agree.

- place attachment or attachment to one's community (5 items),
- ability to be involved in decision-making processes (4 items),
- community spirit or resident togetherness (3 items),

Rating: Strongly dissatisfied to strongly satisfied

- personal safety (4 items)
 One item was added to measure residents' perception of crime in the community
 more specifically rather than relying on the safety items alone
- income sufficiency (3 items),

An item measuring employment security was added rather than relying on income sufficiency items alone, given the health benefits of employment (Lahelma, 1992)

- satisfaction with services and facilities (10 items),
- satisfaction with the built environment (6 items),
- satisfaction with the natural environment quality (5 items)

Rating: Never to very often

social interaction (4 items)

Educational Achievement Item

Because education is identified as an important determinant of health (Hancock, Labonté & Edwards, 1999; Health Canada, 1994), individual educational achievement was assessed with a question asking participants to identify their highest formal educational achievement (See Appendix 3-B).

Household Income and Individual Employment Status Items

Seven questionnaire items were used to measure employment and financial status. These were taken from the Newfoundland and Labrador Adult Labour Force Survey.

Employment was assessed by asking residents to state the number of months employed in the last year and their current employment status. Income was assessed by five items. Residents were asked to rate their current financial circumstances as "Very good", "Good", "Satisfactory", "Just getting by" or "Can't cope". Residents were also asked to identify whether their household was financially "Better off", "About the same" or "Worse off" than the previous year. Residents were asked to identify the source of their income (employment or other), and finally, they were asked to identify their income

bracket among twelve income intervals (see questionnaire; Appendix 3-B). As another measure of income sufficiency, a food security item from the Newfoundland and Labrador Adult Health Survey (NLAHS) was used. Residents were asked to identify how often they or anyone in their household did not eat the amount, quality or variety of foods they want because of a lack of money; "Often", "Sometimes" or "Never".

Individual Health Items

General health was assessed using a measure of self-rated health (1 item). The use of this item as an indicator of health is quite common as it has been related to depression (Statistics Canada, 1999) and morbidity (Mulsant, Ganguli & Seaberg, 1997). A review of the research in this area has revealed an association between this one item measure and mortality in 23 out of 27 studies (Statistics Canada, 1999). Newfoundlanders and Labradoreans typically score higher on this measure (Statistics Canada, 2005).

Other physical health questions included items borrowed from the NLAHS such as body weight as measured by a weight self-rating item, chronic conditions (1 item) health behaviours as measured using questions relating to smoking (5 items), drinking alcohol (2 items), physical activity (1 item), adopting a healthy habit in the last year such as exercise, or healthy diet (1 item) and three disability / mobility items borrowed from the Canadian Community Health Survey (See Appendix 3-B).

Psychological health (anxiety and depression) was assessed using the General Health Questionnaire – 12 (12 items) (Goldberg & Hillier, 1979; McDowell & Newell, 1996). The GHQ-12 includes items such as the ability to concentrate, feeling under strain, feeling depressed, etc. Respondents are asked to select an answer to each item ranging

from "better than usual" to "much less than usual" according to how they have felt in general, over the last few weeks. Another measure of psychological health was a question asking the respondent to identify how stressful their lives are on a five point scale from not at all stressful to extremely stressful, borrowed from the NLAHS (See Appendix 3-B).

Finally, as a measure of social support, suggested to be important for psychological health (Baum, 2002), individuals were asked whether or not there was someone in their life, other than their spouse, with whom they felt at ease, and to whom they could turn for assistance. Response choices were "yes" or "no".

Open-Ended Question about the Community

The last question of the survey was open-ended "Is there anything else you would like to say about living in your community?", and designed to let participants share their feelings about community well-being.

b) Social Capital Questionnaire Content

Questionnaire items relating to social capital that were used are described below. These include attitudes and beliefs, cognitions and behaviours that are suggested indicators of social capital, and cognitions that are proposed predictors of social capital.

Social Capital Indicator Items

Sense of community, a suggested indicator of social capital (Pooley, Cohen & Pike, 2005), was measured by ten Likert scale items (four sub-scales) included in the Sense of Community Index as suggested by Obst and White (2004) (see Appendix 3-B).

Rating: Strongly disagree to strongly agree.

- Sense of membership or belonging to a group (3 items),
- Influence between residents (2 items),
- Needs fulfillment (2 items),
- Emotional connection (3 items),

Though most authors agree that all items should be included in gauging one's SOC, there has been some debate relating to the appropriate categorization of some of the items into subscales (Chiuper & Pretty, 1999; Long & Perkins, 2003; Obst & White, 2004).

Consequently, items measuring SOC and other items proposed to measure social capital were subjected to a factor analysis, which lent some clarity to the relevance of the concepts when studying social capital. The results of the factor analysis are presented in Chapter 8.

Neighbour trust and collective efficacy are also suggested cognitive or psychological indicators of social capital (Perkins & Long, 2003). Neighbour trust was assessed using four of the SOC items measuring social connections, a conceptually similar concept (Perkins & Long, 2003). Collective efficacy or trust in the effectiveness of organized community action was measured by five Likert scale items, whereby respondents rated the likelihood of occurrence.

Community participation and neighbouring behaviours have been suggested as behavioural indicators of social capital (Perkins & Long, 2002). Community participation was assessed using four yes / no response items. Respondents were asked whether, in the past year, they had volunteered or participated in activities organized by groups in their community. They were also asked whether they had been a member of a

community group and attended meetings. Finally, they were asked if they were a member of a community group and participated in activities outside meetings (see questionnaire; Appendix 3-B). As another measure of participation, residents were also asked how many hours per month they spent volunteering in their community.

Neighbouring behaviours, or informal mutual assistance and information sharing among neighbours, were assessed utilizing 5 items borrowed from Perkins and Long (2002) (see questionnaire; Appendix 3-B).

Social Capital Psychological Predictor Items

The questionnaire also included proposed psychological predictors of social capital cognitions and behaviours (Long & Perkins, 2007; Perkins & Long, 2002), viz., place attachment, communitarianism and community confidence. Place attachment, or one's emotional ties developed over time from behavioural, affective and cognitive ties to the community, was examined using respondents' agreement rating with three items. Communitarianism, the value placed on one's community and working collectively to improve it, was measured by respondent agreement with one item. Community confidence, or perception of past and anticipated improvement or decline in the community, was measured using two items (see Appendix 3-B).

3.3.2.5 Review of Volunteer Database

Social capital has been measured using indicators of associational activity (volunteer organizations). Positive relationships have been found between associational membership and higher levels of social trust and political tolerance (Cigler & Joslyn, 2002; Wollebaek & Selle, 2002). A list of volunteer groups was generated for both communities through a volunteer database, maintained by the Community Services

Council of Newfoundland and Labrador (2005). When using such information to study social capital, Schuller, Baron and Field (2000) suggest considering members, related public or private good, extent of participation, purpose of activities, etc. This suggestion leads to the use of additional methods, such as interviews in order to better understand social capital.

3.3.2.5 Statistics Obtained from Government Sources

Statistics relating to several aspects of community well-being (crime, employment, income and mortality) were utilized to supplement questionnaire data obtained. The source for the crime data was RCMP Operational Statistics Reporting System, 2001-2004 obtained from Newfoundland and Labrador Statistics Agency, Government of Newfoundland and Labrador. Mortality data were obtained from the Clinical Database Management System 2001/02 to 2004/05, Newfoundland and Labrador Centre for Health Information. Other health survey data was obtained from the NL Adult Health Survey of 2003 as well as 2005 Canadian Community Health Survey findings posted on the Statistics Canada website.

The source for the income and employment data obtained to measure economic well-being and LED was the Community Accounts developed by the Newfoundland and Labrador Statistics Agency, which compiles statistics available from national census and taxation data.

3.4 Participants and Procedure

3.4.1 Phase 1: Community Selection

As a first step, data from the Decade of Change study on all Newfoundland communities that were found to be heavily dependent on the fishery were examined to identify pairs of communities similar in geographic isolation, or distance from the nearest regional center. This was done using the Community Accounts website. Four pairs of communities were identified that met this geographic criterion. The four pairs were further examined on demographic characteristics and economic recovery in order to select one that recovered (presumably through some form of LED), and one that did not, for case study. The results of this phase are presented in Chapter 4.

3.4.2 Phase 2: Mixed-Method Case Studies

The fieldwork began in September, 2005 with the ethnography (including observation, participation and document review), and was followed by interviews and focus groups with leaders, volunteers and residents and finally, the resident survey. There was some chronological overlap between these methods. Data collection ended in April, 2006. The following is a more detailed description of the procedure and participants for each method. The method used to obtain consent can be found in section 3.5.

3.4.2.1 Ethnography

Fieldwork, the data-collection phase of the research process, took place over a 6 month period. During this time, ethnographic notes were taken in regular, systematic ways while observing and participating in the daily lives of others. As recommended by Emerson, Fretz and Shaw (1995), these field notes were taken giving special attention to

indigenous meanings and concerns of the people studied, and formed the basis for writing broader, more coherent accounts of their lives, by incorporating the data collected using other methods. The field notes included content from informal conversations and observational participation techniques. The field research consisted of regular visits over a period of seven months. The researcher stayed in the communities during the week and every other weekend. During this period, time was spent asking questions, listening, watching what was happening, studying documents, in other words collecting whatever data was available to throw light on issues of concern such as historical perspective, social and economic resilience processes and well-being. This work also helped identify key informants to be interviewed.

Though observation took place over the entire seven-month period, observation of community participation occurred mainly through participation in community events; this provided insights on the quality of social capital in the community. These events are outlined in Table 3.1 below.

Table 3.1 Observation methods of community participation

	Com	munities	
	Bigcove	Dorytown	
Participation in Community	Firemen's Bingo	Recreation's Flea Market	
Events	United Church Women's	Recreation Bingo	
	(UCW) Anniversary Dinner		
	UCW Christmas Party	Xmas tree ceremony	
	Church Service	Informal Bonfire	

When informal conversations took place and after participating in local events, observations and salient details were noted in an ethnographic journal. The notes were usually taken in abbreviated format during the observations, or immediately afterwards

(if note-taking was not possible or would have been deemed inappropriate) and completed later that day, when more time was available to do so. Events and occurrences or conversations were then explained in more detail along with more description such as feelings experienced by the researcher or perceived of residents, or more physical details which add context.

3.4.2.2 Document Review

Three key documents written by residents emerged and were used to gain context. In Bigcove, two documents were used: The first one was "Lane, S. (1990) Interview with Mrs. Millie Johnson of Bigcove. History of Bigcove." a university student report about the social economic, religious and political history of the community. The second one was "Bigcove Come Home Year Celebrations, July 22-30, 2000", a document about the community prepared by the Come Home Year Committee for all community residents as well as expatriates returning to participate in a festival. It contained some history of the community and more present-day information. In Dorytown, a publication entitled "A Measure of Success: The Story of Dorytown" by N. Tucker (2004), a community resident and leader, was an extensive account of the town's history with the fishery and its decline, along with its religious and social life, up to the millennium. Information from the documents was verified by discussing it with other residents and comparing them to academic research that had been conducted on the region.

3.4.2.3 Interviews

A total of 19 interviews were conducted (See Table 3.2 for a description of interview participants).

Table 3.2 Interview participant characteristics; age, sex and role

	Resident	Age (Years)	Sex	Role
Bigcove	1-10	25-65	10 Males	Volunteer Fire
			1 Female	Department
	11	50-55	Male	Resident
	12	50-55	Female	Recreation
				Committee
	13	55-60	Female	Town Council
	14	60-65	Male	Town Council
	15	60-65	Female	Town Council
	16	60-65	Female	
	10	00-03	remate	Women Church
	17	65+	Female	Group Women Church
	17	051	remate	
				Group /
				Community
				History
Dorytown	1	30-35	Female	Tourism Group
•	2-4	35-65	Females	Residents /
			1 01110100	Tourism
				Employees
	5	40-45	Male	Town Council
	6	40-45	Female	Tourism Group
	7	50-55	Male	
	8	60-65		Tourism Group
	9		Male	Former Mayor
	9	65+	Male	Recreation
	10	651	3.6.1	Committee
	10	65+	Male	Tourism Group /
				Community
				History
×				
Government	1	35-40	Female	ACOA Officer
Representatives	2	45-50	Female	HRSDC Project
	-		. ciliuic	Officer
	3	40-45	Male	HRSDC
	5	TU	Maic	
				Employment
				Councillor

Eight interviews were conducted in each community with leaders, volunteers and residents to learn about CED, partnerships, volunteer activities and social capital).

Interviews with the three government-funding partners were conducted to learn about

their working relationships with, and supportive role to the communities. These government-funding partners serviced both communities as part of their jurisdictions and were identified in interviews with community leaders. They were:

- The regional development officer from the Atlantic Canada Opportunities
 Agency, a Federal Agency under Industry Canada that plans and supports
 economic development in Atlantic Canada. The officer's role is to work with
 community groups and individuals on economic development projects.
- The regional project officer for Human Resources and Skills Development
 Canada (HRSDC). As project officer, her role was to review applications for
 community projects which would develop employment skills at the community
 level.
- The local Human Resources and Skills Development Canada employment
 counsellor. As employment counsellor, he is responsible for processing job
 applications for approved HRSDC community projects. He is also a resource for,
 and advisor to residents from the region who are in search of employment.

Town Council members and other residents identified key interview participants as the project progressed. They were contacted by the researcher and asked whether they would like to participate in an interview about community development and well-being in rural Newfoundland. They were then told that they were being approached because of the perspective they are able to offer as a town councillor, committee member, volunteer or community resident, whatever the case. Participants chose whether they preferred the interview to take place in their home, at the local Town Council building or at another location of their choosing.

Questions were presented in an informal, conversational manner (e.g., "Tell me a little about the history of your town, like people's work, social activities, etc."). Participants were encouraged to provide details of any experiences, perceptions or insights with regards to the various topics presented.

Topics covered in the interviews generally followed a chronological order, (e.g., the history of the town, the fishery collapse, the fallout, current employment and social circumstances, any community development initiatives taking place, the future of their community, etc.). All respondents agreed to be audio recorded with the exception of two. In both cases where the participant refused to be audio recorded, extensive notes were taken during the interview and completed immediately following the interview. A systematic procedure was employed for obtaining consent (see section 3.5)

3.4.2.4 Questionnaire

Finally, the questionnaire was completed by 70 adult residents in each community. The sampling method and procedure was as follows: The voters list was used and every third person on it was called to ask if they would participate. The town clerks called prospective participants. They both used the same script as a guide, stating that a student from the university was conducting a research project on community well-being, and asking whether they would answer a 20-minute questionnaire. Both clerks filled out the questionnaire before they began calling residents so the clerks could address initial questions that they might ask before agreeing to participate. Residents were also asked if the other adults in the household would mind completing the survey as well. Upon agreement, the researcher called to schedule a meeting either at the participants' homes or at a common meeting place such as the town council office. The researcher delivered the

questionnaire and remained present to provide assistance whenever possible or needed; she assisted some participants with literacy or vision difficulties. Town clerks of both communities were instructed to keep calling residents until they began to experience greater difficulty in obtaining respondents.

As can be noted in Table 3.3, the response rate for Bigcove was much lower than for Dorytown; the town clerk telephoned 54 more households in Bigcove in order to obtain the same number of participants as in Dorytown. Recruitment stopped when the town clerks indicated they were no longer successful in recruiting applicants.

Table 3.3 Questionnaire response rates for Bigcove and Dorytown

Method	Comn	nunities
	Bigcove	Dorytown
# Individuals Contacted	115	72
Questionnaire Surveys	70	70
Response Rates	60.8%	97.2%

Questionnaire Participants

The two community samples were compared to determine whether they were demographically similar; they were not statistically different from each other in terms of gender and marital status but Chi Squared calculations revealed a statistically significant difference in age with the Dorytown survey sample containing more people over 60 years of age than Bigcove (see Table 3.4).

Table 3.4 Demographic composition of questionnaire survey samples

Demographics	To	tal	Big	cove	Dory	town	Sta	tistic
	N	%	N	%	N	%	X ²	р
Participants	140	100	70	50.0	70	50.0		
Gender								
Male	77	55.0	40	57.1	37	52.9	0.26	0.61
Female	63	45.0	30	42.9	33	47.1		
Age^{10}								
20 and Under	2	1.4	0	0	2	2.9	8.82	0.03
21-30 yrs	6	4.3	5	7.1	1	1.4		
31-40 yrs	28	20.0	15	21.4	13	18.6		
41-50 yrs	48	34.3	27	38.6	21	30.0		
51-60 yrs	33	23.6	18	25.7	15	21.4		
Over 60 yrs	23	16.4	5	7.1	18	25.7		
Marital Status ¹¹								
Single	12	8.6	7	10.0	5	7.1	0.34	0.85
Married	97	69.3	47	67.1	50	71.4		0.00
Common Law	23	16.4	12	17.1	11	15.7		
Married								
Divorced	1	0.7	0	0	1	1.4		
Widowed	7	5.0	4	5.7	3	4.3		

Sample age and gender representation was verified by comparing sample composition with the census population statistics that later became available for the period of survey data collection (Statistics Canada, 2006).

The gender population statistics revealed a slightly higher sample representation for men in Bigcove. Dorytown however, seemed to be representative of available population gender statistics (see Table 3.5).

¹⁰ This Chi Square was computed by combining the first three age categories in order for the number of cases per cell to allow for Chi Square calculation.

¹¹ This Chi Square was computed by combining single, divorced and widowed categories in order for the number of cases per cell to allow for Chi Square calculation

Table 3.5 Survey respondents by gender

Gender	Bigcove Survey Sample	Bigcove Census 2006	Dorytown Survey Sample	Dorytown Census 2006
Male	57.1	47.9	52.9	53.0
Female	42.9	51.1	47.1	47.0

The 2006 Census data would seem to indicate that although participants were randomly selected, the fact that more people declined to be interviewed in Bigcove may have skewed this community's sample to under-represent seniors (7%). According to the most recent Census statistics, the proportion of seniors for this community is 22.5% (see Table 3.6). The survey sample in both communities also appeared to under-represent the 41 to 50 year old age category.

Table 3.6 Comparison of survey sample age representation to 2006 census data

Age	Bigcove Survey Sample	Bigcove Census 2006	Dorytown Survey Sample	Dorytown Census 2006
18-20 yrs	0.0	?	2.9	?
21-30 yrs	7.1	9.1	1.4	9.4
31-40 yrs	21.4	17.0	18.6	13.0
41-50 yrs	38.6	18.1	30.0	15.2
51-60 yrs	25.7	25.9	21.4	24.5
Over 60 yrs	7.1	27.3	25.7	32.1

3.4.2.5 Review of Volunteer Database

The volunteer association database described in the methods section was used to identify not-for-profit groups and organizations relevant to the study of social capital. Lists were validated by residents and the information was analyzed along-side other social capital data that provided more details relating to association members, related public or private good, extent of participation and purpose of activities.

3.4.2.6 Review of Relevant Government Statistics

As stated in the methods section, any government statistics that could complement the study were used to supplement the data collected through the questionnaire and other qualitative methods. Statistics relating to several aspects of community well-being (crime, employment, income, mortality and crime) as well as data pertaining to LED (employment and employment insurance data) were accessed. These data sources are described in the methods section of this chapter.

3.5 Ethics Approval and Consent

A university research ethics committee reviewed and approved the research project methods and procedure (see letter of approval, Appendix 3-C). Accordingly, certain consent protocols were followed.

Initially, the project proposal was presented to members of each community's town council. The project proceeded conditional on obtaining verbal community consent from these council members. As specified by the university's ethics committee, consent was to be obtained utilizing specific forms with interview and survey participants (see consent forms; Appendix 3-D). Interview and survey participants signed a consent form explaining that any information identifying him or her would be kept confidential, and would be accessed only by the researcher. Survey participants were also ensured that only the researcher would have access to the completed questionnaires (see consent forms; Appendix 3-D).

3.6 Analysis

3.6.1 The Researcher's Role, Reflexivity and Process of Analysis

Because these case-studies involved living in the communities for a period of approximately seven months, data collection and analysis occurred in an on-going manner, which produced an evolving understanding of the two communities. As much as I was trying to understand the community and its residents, residents themselves also have their perceptions of the research project and me. At first, I introduced myself to many residents and volunteered to work at community events, in order to make myself known to them. I described myself to residents as a student from a rural community in another Atlantic province that had recently settled and married in Newfoundland. I felt it was important to draw out the commonalities between the community residents and myself in an attempt to increase their level of comfort and disclosure.

In the analysis or interpretation of any data, the principle of reflexivity, that is, how the researcher positions himself/herself within the context, process and production of the research, is of central importance in understanding the residents' perspectives. The residents and I were part of the same social world and all observations were recorded and analyzed in context, following the principle that humans behave differently under different circumstances.

3.6.2 Ethnography (Including Participation, Observation and Document Review)

In both communities, documents written by residents were examined to gather historical, social, religious and political information about both communities. The accuracy of the texts was verified by discussing them with residents, both during interviews and day-to-

day conversations, a common practice (Emmerson, 1995). The notes that were written after participating in community events and informal interactions with residents were reviewed and accuracy of content was verified with residents. Subsequent to the completion of data collection, a better understanding of the community dynamics and context was achieved. At that point, the notes were read and any salient information was extracted. An effort was made to interpret the notes from a more critical perspective, considering underlying conditions, patterns, or cultural norms that would influence day-to-day conversations with residents. This exercise is key in exploring social and economic determinants of health (Cook, 2005). Any relevant ideas that were generated were also "searched for" in the data collected from key informant interviews or the survey in an attempt to support or triangulate the findings.

3.6.3 Questionnaire Data

All questionnaires were entered into a SPSS data file for analysis. Questions for which the respondent selected a response from distinct categories (as in multiple-choice questions such as employment status), were analyzed by producing frequency data and chi-square tests were calculated in order to determine whether a statistically significant difference existed between communities in the responses selected. Questions for which the respondent selected from continuous numbers (as in the case of a continuous variable such a Likert scale) were analyzed using parametric statistics (calculating means and testing for differences between the means; t-statistic), when the responses met the criteria of normality. In cases where the answers did not meet the criteria of normality, non-parametric statistics (Mann-Whitney Rank Sum-U) tests were calculated to assess rank differences between communities, yielding z scores and p values.

3.6.4 Key Informant Interviews

All but two interviews were tape-recorded and all were transcribed into separate Microsoft Word files. These were then repeatedly reviewed for recurring patterns and themes. Two Microsoft Word files were composed with themed text, one file for each community. Then, the communities were compared. This further analysis of the themes revealed interesting similarities and contrasts between the communities. At that point, the results were merged into one file and reported by theme. At the outset, the transcripts were approached bearing in mind the concepts reviewed in the literature. This approach is often referred to as directed content analysis (Hsieh & Shannon, 2005). However, upon re-reading and re-analyzing the narratives, the analysis became more inductive in nature, introducing new ideas that went beyond the proposed theoretical framework. That is the approach became more open to emerging themes and ideas, which resembles conventional content analysis (Hsieh & Shannon, 2005). During the analysis, interviews were considered as social encounters, with specific interactional contingencies where the interviewer and interviewee work to construct themselves as certain types of people in relation to the topic. Awareness of the local context of data production is paramount to analyzing the data (Rapley, 2001).

3.6.5 Statistics Obtained from Government Sources

For the most part, health-related, crime, employment and income statistics for the two communities were simply sought out and reported as they exist. These were utilized to provide data from an additional source in an effort to supplement questionnaire data and build as complete a portrait as possible of the variables in question.

In summary, a combination of qualitative and quantitative methods was utilized over a period of seven months to collect the research data. The results are presented in the following four chapters. Chapter 4 presents the results of the community selection, highlighting the reasons for selecting the two case-study communities. Chapter 5 contains a review of background statistics and a brief history to provide some context for interpreting the data presented in subsequent chapters. Chapters 6, 7 and 8 present community well-being, local economic development and social capital findings respectively.

3.7 Experiences in the Field

As previously described the project took place over a period of seven months during which the researcher lived in the communities, enabling interaction with residents and leaders, participation in community events, and becoming acquainted with the culture of each community. As such the findings reported in chapters four, five and six are described in a manner consistent with these experiences. In an effort to maintain research integrity, any contradictory evidence has been and interpreted as it was experienced, with the provision of additional contextual information where it was helpful in providing a clearer picture of the two communities.

Overview of Chapter 3

- Based on the literature reviewed in Chapter 2, a theoretical framework was constructed, from which three main research questions were developed;
 - O What is the character community well-being for communities who have adjusted differently since cod moratorium of the 1990s?

- O In what way have specific social (social capital) and economic (LED) processes impacted community well-being?
- O What is the nature of the relationship between social capital and LED?
- These questions were explored through multi-method case-studies. The research design involved two phases. The first phase was to select two communities suitable for further case study that were similar in geographic isolation, demographic profile and fishery dependency before the decline, and different in terms of economic recovery. One would have presumably benefited from greater Local Economic Development (LED) and the other, less as indicated by employment and business statistics. The second phase was the multi-method community case studies.
- The case study methods used to investigate the key concepts were document review, ethnographic note-taking, key informant interviews, and questionnaires.

Chapter 4: Community Selection

This chapter describes the first phase of the research project; the selection of a pair of communities for further case study. Four pairs of candidate communities were identified using the data identified in Chapter 3. They were labelled communities A and B, C and D, E and F, and G and H. This chapter presents the geographic, demographic and economic profiles for each candidate pair using statistics available from the early 1990s to 2001, the last census data period prior to the community case studies. Statistics and other government data subsequent to 2001 were included as part of the findings reported in chapters six, seven and eight.

From the statistics examined, two communities were selected that were similar in geographic isolation, general demographics, and extent of fishery dependency, but different in terms of economic recovery (as indicated primarily by employment recovery and new businesses).

4.1 Geographic Profiles

In order to identify and select a pair of communities suitable for comparison, four pairs of candidate communities were considered. One of the main criteria for selection was similarity in geographic isolation. Maps were constructed to measure distance between the communities and their regional centres. To preserve the anonymity of the communities, they have not been included in this document. In the remainder of the chapter, each pair of communities is identified by letters (i.e. pair A and B, pair C and D, pair E and F and pair G and H).

4.2 Demographic Profiles

4.2.1 Population Change

During the 1990s, the provincial population declined by 10% (579,518 to 521,986), with the greatest decline in rural areas, due in part to high levels of out-migration and decreased birth rates following the moratorium (Murray et al., 2006). This population change is quite significant when compared to that of the prior decade (0.8% increase). Within the province, population movements have also been occurring from rural to urban areas, further contributing to rural population decreases (Government of Newfoundland and Labrador, 2002).

Table 4.1 Population change between 1991 and 2001 for communities A, B, C, D, E, F, G and H

	Communities							
•	A	В	С	D	E	F	G	Н
Population 1991	710	535	185	120	1,570	1,090	310	220
Population 1996	630	460	175	100	1,450	-990	270	210
Population 2001	530	355	160	90	1,320	830	270	180
% Population Change								
1991-2001	-25	-34	-13	-09	-16	-22	-17	-23

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

As seen in Table 4.1, the decreasing population trend can be observed in all eight communities identified above, with the greatest declines in the pair of communities A and B.

4.2.2 Age

Table 4.2 describes the proportion of residents in each community below 25 and 65 and over for 1991, 1996 and 2001. Age composition changes between 1991 and 2001 are also provided for the eight communities.

Table 4.2 Changes in age composition for communities A, B, C, D, E, F, G and H

	Communities							
	A	В	С	D	E	\mathbf{F}	G	H
% under 25 years 1991	39	36	46	35	41	41	33	36
% under 25 years 1996	33	29	46	37	36	35	34	33
% under 25 years 2001	26	20	38	18	30	28	29	31
% change for under 25 (1991-2001)	-10	-16	08	-17	-11	-13	-04	-05
% aged 25 to 64 1991	45	48	46	65	46	36	56	47
% aged 25 to 64 1996	54	51	45	59	50	53	61	52
% aged 25 to 64 2001	58	59	46	82	55	59	60	47
% change for 25 to 64 (1991-2001)	13	11	0	17	9	23	4	0
% over 64 years 1991	16	16	08	0	13	23	11	17
% over 64 years 1996	13	20	09	04	14	12	05	15
% over 64 years 2001	16	21	16	0	15	13	11	22
% change for over 64 (1991-2001)	0	05	08	0	02	10	0	05
Median Age 2001	41	39	29	40	40	37	44	40

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

According to the above data, the proportion of young people (under 25) has declined in all communities, whereas the proportion of people aged 65 years and older has increased in most communities for which the data are available. Interestingly, the percentage of residents aged 25 to 64 increased or stayed the same for all communities. The median age would indicate that communities A, D, E and G were older than their counterpart communities in 2001, with median age being the most similar for pair A and B.

4.2.3 Economic Profiles

4.2.3.1 Employment Elasticity

As indicated above, an index was calculated in order to gain a sense of resilience in employment since the fishery moratorium in each community. Using annual employment data from tax files between 1992 and 2001, the following formula was calculated for each community:

Table 4.3 outlines employment elasticity between 1992 and 2001 for each of the 8 communities under consideration.

Table 4.3 Employment elasticity between 1992 and 2001 for communities A, B, C, D, E, F, G and H

	Communities							
,	A	В	С	D	\mathbf{E}	F	G	Н
Employment Elasticity 1991-2001	0.61	0.14	0.5	0	0.36	0	1.0	0

Source: Data from the Canada Customs and Revenue Agency, compiled in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

Employment Elasticity corresponds to the proportion of employment regained as of 2001 since the lowest point of employment in the 1990s. For example, a score of 0.61 indicates that Community A has recovered 61% of jobs lost since its lowest point in the 1990s. As can be seen above, this economic indicator clearly separates communities A,

C, E, and G from their respective counterparts B, D, F, and H. An employment elasticity coefficient of 0 may signify that the community has either failed to recover any of the lost jobs since its lowest point of the 1990s or it may have continued to lose jobs since its lowest point in the 1990s.

4.2.3.2 Total Businesses

The number of businesses per community in 1991 and 2001, as contained in the Statistics Canada Business Register, along with the net change in the number of businesses between 1991 and 2001, are identified in Table 4.4 below.

Table 4.4 Total businesses in 1991 and 2001 for communities A, B, C, D, E, F, G and H

	Communities							
-	A	В	C	D	E	F	G	Н
Total Businesses 1991	7	9	2	4	25	39	2	0
Total Businesses 2001	10	7	3	5	31	41	9	7
Change 1991-2001	3	-2	1	1	6	2	7	7

Source: Statistics Canada Business Register obtained through the Decade of Change project (Murray et al., 2006)

Using the number of new businesses as an indicator of Local Economic Development supports the selection of either pairs A and B, or E and F as case-study communities; with A and E demonstrating greater business creation than B and F.

4.2.3.3 Economic Self-reliance

Table 4.5 illustrates other measures of economic performance that were examined, such as the proportion of residents in each community who has benefited from transfer incomes from various government programs during the years 1991, 1996 and 2001. Self-reliance is the proportion of all revenues in a community having come from government

programming. The proportion of change between 1991 and 2001 in self-reliance, employment insurance, social assistance, Old Age Supplement and Canada Pension Plan are highlighted in Table 4.5.

In examining the self-reliance indexes calculated for each community during the decade, it appears that all communities became less self-reliant (more reliant on transfers) during 1996, and more self-reliant (more reliant on income) in 2001. This incline in self-reliance happens in conjunction with the decline in population and the end of income assistance government programs for displaced fishery workers. Though it provides useful information on dependency of government transfer incomes, it combines Employment Insurance and Social Assistance. When judging economic performance in a seasonal economy, it may be preferable to consider them separately. In this case, the most relevant indicator of economic success (or lack thereof) may be Social Assistance.

Table 4.5 Employment Insurance, Social Assistance, Old Age Security and the Canada Pension Plan in 1991, 1996 and 2001 for communities A, B, C, D, E, F, G and H

				Comm	unities			
	A	В	С	D	E	F	G	Н
% Self Reliance 1991	59	52	65	64	48	64	61	68
% Self Reliance 1996	32	42	5	31	47	63	40	51
% Self Reliance 2001	54	53	64	58	55	68	63	62
% Change in Self-	-05	01	-01	-06	07	04	02	-04
Reliance 1991-2001				Appropriate (Appropriate (Appro				
% EI Incidence 1992	81	73	49	71	77	61	82	74
% EI Incidence 1996	43	38	21	80	64	43	81	63
% EI Incidence 2001	63	60	59	79	68	63	76	48
% Change in EI	-18	-13	10	08	-10	-06	-06	-26
Incidence (1992-2001)								
Social Assistance Incidence 1992	18	19	07	09	16	14	17	10
Social Assistance	21	18	19	03	21	17	26	17
Incidence 1996	21	10	19	03	21	1 /	20	1 /
Social Assistance	17	24	04	07	15	12	11	12
Incidence 2001	• •		•	0 /	10			
Change in Social	-01	06	-03	-02	-01	-02	-06	02
Assistance Incidence								
(1992-2001)								
OAS Incidence 1991	10	15	NA	NA	11	09	12	14
OAS Incidence 1996	14	~ 19	11	NA	13	13	10	19
OAS Incidence 2001	15	16	13	15	15	16	10	22
Change in OAS	05	02	NA	NA	04	06	-02	09
Incidence (1992-2001)								
CPP Incidence 1992	11	13	11	NA	04	06	-02	09
CPP Incidence 1996	14	15	11	NA	13	11	09	15
CPP Incidence 2001	17	19	NA	NA	17	16	16	22
Change in CPP Incidence (1992-2001)	06	06	NA	NA	04	06	-02	09

Source: Data from the Canada Customs and Revenue Agency, compiled in Community Accounts. Newfoundland and Labrador Statistics Agency, Government of Newfoundland and Labrador.

Economic Self-Reliance Ratio

The ratio of market income (of all kinds) to total personal income. For example, for a community that has a self-reliance ratio of 70.0%, this means that of all the income flowing into that community, 70 cents on the dollar came from market sources; the other 30 cents was transfers from government.

Employment Insurance Incidence (As taken from the Community Accounts Website, Government of Newfoundland and Labrador)

Refers to the number of people receiving Employment Insurance during the year divided by the number of people in the labour force.

We define the labour force here as the number of people who received employment income or employment insurance within the year (this differs slightly from the definition given in Statistics Canada's Labour Force Survey).

Social Assistance Incidence is the number of people receiving Social Assistance during the year (including dependents) divided by the total population.

OAS Incidence is the number of people receiving Old Age Security benefits during the year divided by the total population as represented by the number of tax-filers and dependants.

CPP Incidence is the number of people receiving Canada Pension Plan benefits during the year divided by the total population as represented by the number of tax-filers and dependants.

4.2.3.4 Participation in Fishery Adjustment Programs

Table 4.6 presents the percentage of residents in the community having received income from fishery adjustment programs Northern Cod Adjustment and Restructuring Program (NCARP) and The Atlantic Groundfish Strategy (TAGS). This was a useful indicator for fishery dependency. The pair of communities in which the most residents benefited from NCARP and TAGS were A and B.

<u>Table 4.6 Percentage of Population in Receipt of Fishery Adjustment Programming</u> (NCARP and TAGS) for Communities A and B, C and D, E and F, and G and H from 1992 to 1998

		NCAF	RP		TAGS			
	1992	1993	1994	1994	1995	1996	1997	1998
Communities								
A	28	29	26	28	26	27	24	23
В	17	17	15	18	17	17	17	16
С	*	*	*	13	12	13	12	11
D	*	*	*	37	33	35	28	25
Е	17	16	13	16	15	15	14	11
F	17	17	14	17	15	15	13	12
G	7			16	20	20	18	14
Н	5			11	14	11	8	8

Source: Community Accounts. Newfoundland and Labrador Statistics Agency, Government of Newfoundland and Labrador.

*Communities C and D had not yet been impacted by a fishery closure from 1992 to 1994 inclusive, and therefore did not receive government assistance through the NCARP program.

Median Family Income

Table 4.7 illustrates the median family incomes of all types for each of the eight communities in 1991, 1996 and 2001. The table also includes the proportion of change between 1991 and 2001.

Table 4.7 Median family incomes of all types in 1991, 1996 and 2001 for communities A, B, C, D, E, F, G and H

				Comm	unities			
	A	В	C	D	E	F	G	Н
Median Family Income (all types) 1991	21300	18000	24000	23300	18900	23300	21600	21900
Median Family Income (all types) 1996	20500	18800	20800	25300	21500	26900	20700	23200
Median Family Income (all types) 2001	24600	24800	33400	29900	29500	34700	25700	34200
% change in Family Income (all types) 1991-2001	15	38	39	28	56	49	19	56

Source: Data from the Canada Customs and Revenue Agency, compiled in Community Accounts. Newfoundland and Labrador Statistics Agency, Government of Newfoundland and Labrador.

All communities are showing a growth in median family income between 1991 and 2001.

4.3 Selection of Two Case Study Communities

The previous section outlined demographic and economic data for four pairs of communities comparable in geographic isolation. The aim was to select one pair of communities containing one that had greater economic recovery than the other for further study. Though the intention was to rely more heavily on employment recovery for the selection, in order to obtain a more comprehensive picture economic recovery, geographic, demographic, and economic indicators were examined.. It was difficult to select two communities that demonstrated a contrast in LED. Using indicators such as employment recovery and changes in business composition, it was determined that communities A and B provided the most convincing case for economic recovery and lack of recovery.. The choice was further supported by data on median income (greater for B

than A) and demographic data (1990s out-migration greater for A than B). In the following chapters, Community A will be referred to as Bigcove, and Community B as Dorytown.

Overview of Chapter 4

- Four pairs of communities that were similar in geographic isolation were selected
 from a list of fishery dependent communities in Newfoundland. The aim was to
 select a pair of communities that would be suitable for mixed method case studies.

 It was determined that the communities should be generally similar in
 demographics and fishery dependency prior to the fishery decline, but different in
 terms of economic recovery.
- Communities A and B were selected based on their similarity in geographic isolation or distance from a regional center, fishery dependency, and age profiles, etc. Most importantly, the two communities provided the most convincing case of substantial difference in economic development based on employment recovery and business development Community A sustaining greater economic development than Community B.
- The relative recovery of Community A over Community B was also supported by the comparatively greater loss of population and increase in social assistance for Community B during the 1990s.
- In subsequent chapters, Communities A and B are referred to as Bigcove and Dorytown, respectively.

Chapter 5: Community Background

In order to provide context for interpreting the findings as they pertain to the analytical framework (theoretical model presented in Figure 3.5 and three main research questions), this chapter begins by presenting a brief historical profile of each community constructed through document review and other fieldwork, followed by a statistical profile for the two communities. The aim was to present some historical background as context leading up to the time of the study (early 2000s) that would help make sense of the trajectory of these communities. It is not a rich history of these communities. More current information about the communities (quantitative and qualitative) relevant to the period of data collection is reported as findings in subsequent chapters.

5.1 Historical Profiles

As mentioned in the methodology chapter, books and other documents were used along with accounts from community members to construct historical profiles of each community.

Early settlement of both communities

According to Staveley (1977), the first phase of settlement in Newfoundland focused on the eastern portion of the Avalon Peninsula. Both of these communities were settled as part of a second phase of settlement referred to as a "great shaking loose of migrants from the countryside" that commenced during the mid 1800s. Data from that period suggested that settlement occurred through the natural population movements and births from those already in Newfoundland.

5.1.1 Bigcove Historical Overview

The Newfoundland Census Reports of 1857 contained the first entry of population statistics for Bigcove. Church of England and Methodist Church records indicate that settlement in the community began in the 1830s (Come Home Year Committee, 2000). Like many Newfoundland outport communities, its settlement was tied to the fortunes of the fishery. Records would indicate that even in the very early settlements, residents claimed to be born in Newfoundland. This indicates that the community was mainly settled by people from other Newfoundland communities, which is consistent with the scholarly work on population settlement cited above (Staveley,1977).

Lane's report (1990) on the history of the community suggested that no merchant initially settled in Bigcove with whom residents could trade their fish for food; residents relied on marketing their fish to merchants from neighbouring communities (Lane, 1990). Two merchants came to fulfill this role in the early 1900s. The men were occupied by the fishery, which increased in production with the introduction of cod traps and gasoline engines. The women participated mainly in processing activities (splitting, salting and drying) along with their other duties of farming and child rearing. Indeed, subsistence farming was an important part of life for the community. This included growing root vegetables and keeping cows, sheep, pigs and hen. In the region, farming was particularly critical to supplement low incomes caused by cyclical downturns in the fishery. Goods produced were often traded for other items that could not otherwise be purchased (Caddigan, 2002). The tradition of seal hunting played an important role in offering income at a financially lean time of year. Sadly, six men from the community lost their lives in the Great Sealing Disaster of 1914 (Lane, 1990).

It was common for the men working in the fishery to seasonally migrate for work in lumbering and other types of construction, also known as occupational pluralism (Newfoundland and Labrador Royal Comission on Employment and Unemployment, 1986). Until the moratorium, many residents were employed at a nearby fish processing plant. Employment in the fishery was plentiful. During the 1990s, working residents have been employed in fish processing, fish harvesting, migrating for seasonal work, and working in the public service. Detailed information on employment patterns for Bigcove is provided in Chapter 7.

With regard to social activities in Bigcove, the religious denominations of the early 1900s were the Methodists and the Church of England, who shared the use of one structure for services. A subsequent church built in 1914 still stands erect and serves as a United Church of Canada. Though it was once a vibrant place of meeting, declines in population and the popularity of religion, and availability of ministers are contributing to a weak attendance rate, as is commonplace for rural communities. A group of core church-goers maintain the structure and during a service attended as part of the fieldwork of this project, several residents spoke of 'saving their church'. An Orange Lodge also gathered community groups such as the Orangemen, the Loyal Orange Benevolent Association, and Orange Young Britains in social activities in mid 1900s. However, the Lodge was torn down after decaying. A series of fires also burned schools that had once stood in the centre of the community. These were replaced by another school, whose usage was discontinued after regionalization of school services and displacement to neighbouring towns in the last decades. The former school is now under private ownership and used for storage. The first town council was formed in 1965 and met in the town hall (Lane,

1990). According to residents' accounts some social gatherings now occur in the town hall, the only social gathering space in the community, which houses the Town Council and local Fire Department. Other recreational features of the town include a playground for children, a municipal pond and a hiking trail.

According to resident accounts, owners and operators of fishing vessels historically settled on one side of the harbour, while the other side was populated by those who depended on them for work, and were of more modest means. This geographical class separation is not uncommon to outport communities. Residents of the early baby boomer and older generations, in informal conversations, spoke of a resulting socio-economic divide in the community, which affected the nature of social interactions. Examples include exclusion from church-related activities where monetary contributions were required, etc. One resident commented that the advent of government social programming weakened this socio-economic disparity. The effects of this cleavage were apparently felt much more explicitly in the past than they are today.

5.1.2 Dorytown Historical Overview

The first attempt to settle this community was made by Irish Catholics in the late 1770s.

They were driven out by order of the Governor of Newfoundland in 1774. The following settlers were English, and primarily of Anglican faith. Two other religious denominations (Salvation Army and Pentecostal) came to exist, by all accounts harmoniously, along-side the others. Currently, only a small Anglican membership and larger group of United Church members are active in the community ([Turner], 2004).

As in Bigcove, the fishery served as the main attraction for settlement and primary source of employment in Dorytown, supplemented by subsistence farming, berry picking, small game and seabird hunting. Until at least the mid 1900s, these activities formed an important part of making a living, particularly in times of fishery downturn (Caddigan, 2002). Also, the sealing industry supplemented incomes, sometimes at a high cost that many hunters paid with their lives. One such loss includes the eight men lost in the Newfoundland Sealing disaster mentioned above (Tucker, 2004). A robust fishery was always the main economic engine of the town. Several merchants operated, trading goods for fishermen's catches. Merchant operations came to be replaced by fish processing companies and the fishery continued to thrive for a period (Tucker, 2004). It finally began to decline in the 1970s and 1980s with less fish processing and harvesting job opportunities. The fading fishery came to a close with the cod moratorium announcement. In the following years, people clung to the hope of the closure being a temporary measure; it has become clear that the return of the fishery of yesteryear is not likely. Over a period of one hundred years, the population has dwindled from close to a thousand in the late 1800s to just over 300 in 2003.

An interview with a Sean Caddigan, a historian who had studied that community in the 1990s, revealed that before the cod moratorium, many residents had begun to leave the community due to declining work in the cod fishery, and many more continued to do so afterwards (personal communication, July 02, 2011).

In the mid-1990s, the community is commonly described to have hit "rock-bottom". The town council was in such financial disarray with the declining population and growing expenditures for services that it became unable to pay some of its bills. Eventually,

Newfoundland Power turned off most of the town's lights. The town council turned off the remainder, citing residents' low tax contribution rate (Tucker, 2004). Soon after, steps were taken to discontinue water service to some homes. Residents watched in disbelief as their problems received national media attention. Fortunately, in 1998 a new town council passed a motion to make use of the existing lights, and install more street lights on the main road. Dorytown began to recover from the adversity.

According to a published account (Tucker, 2004) and in speaking with former town council members, a very important part of the revitalization of Dorytown was the formation of two committees; a new Recreation Committee and Tourism Committee. The Recreation Committee set out to save an old school building from demolition through government funded projects and volunteered work. The building now houses; a tourism centre; a large reception hall for activities including ball hockey for youth, dances, bingos, etc.; a Sunday school that serves the whole community; and a youth arcade. The Tourism Committee established a mandate of developing tourism in the area, showcasing town folklore, subsistence living and community features such as a sandy beach with a serviced municipal park, and a puffin sanctuary. Their activities are featured in detail in the subsequent chapters.

During the 1990s, some residents were employed in a fish processing plant, or in the public sector, in a nearby regional centre. Historian Dr. Sean Caddigan recalled that during his research in the Dorytown area in the 1990s, he was struck by the pride many residents displayed in their vegetable gardens, though he suspected the activities played a less important role for sustenance than in previous decades (personal communication, July 7, 2011).

Current social and economic features of the communities (activities, employment, etc.) are provided in the following chapters.

Geographic location of Bigcove and Dorytown

No information collected during this project suggested that one community's geographic location was particularly more advantageous than that of the other.

5.2 Bigcove and Dorytown: Background Statistical Profiles 1990-2001

The following statistical profiles are presented as a backdrop to interpretation of the findings outlined in future chapters.

5.2.1 Demographic Profiles

Both communities sustained a population decline in the 1990s. The population of Bigcove shifted from 701 to 530 residents, and the population of Dorytown declined from 535 to 355. Dorytown lost a higher proportion of its residents (34%) than Bigcove (25%) (see Figure 5.1), with the greatest declines occurring between 1996 and 2001.

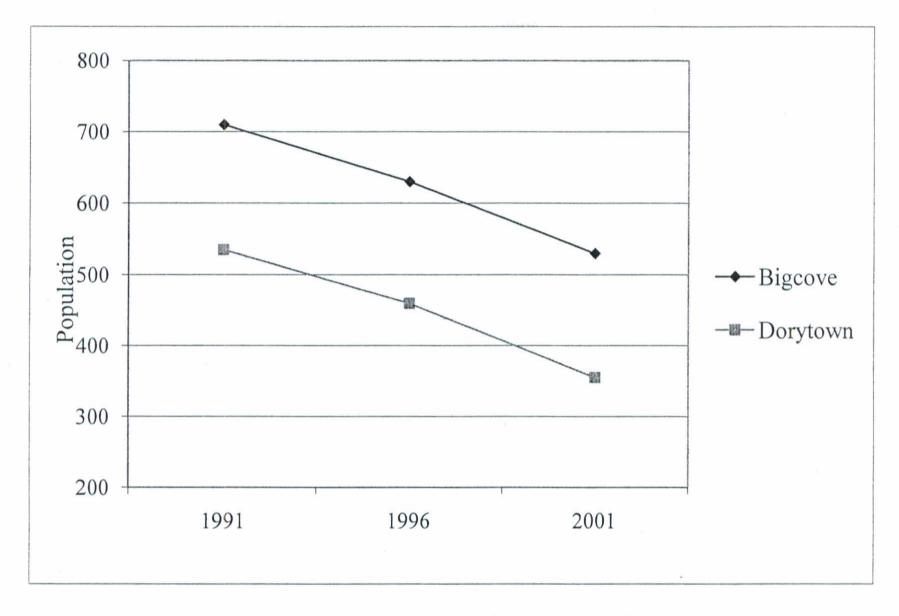


Figure 5.1 Population decline during the 1990s for Communities A and B

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

The age profiles of both communities are represented in Table 5.1. The age composition of the two communities was relatively similar in 1991; they were similar in the proportion of people under the age of 25 and between 25 and 64 and they had the same proportion of people over 64. Both communities sustained declines in the proportion of youth residents. Slight differences in age composition between the two towns were observable in 2001; Bigcove appeared to have a slightly greater proportion of people under the age of 25 than Dorytown, and a smaller proportion of seniors than Dorytown. The median age in both communities was similar in 2001, with 41 for Bigcove and 39 for Dorytown.

Table 5.1 Age distribution for Bigcove and Dorytown (1991 to 2001)

	Comn	nunities
	Bigcove	Dorytown
% under 25 years 1991	39	36
% under 25 years 1996	33	29
% under 25 years 2001	26	20
% change for under 25 (1991-2001)	-13	-16
% 25 to 64 years 1991	47	45
% 25 to 64 years 1996	55	48
% 25 to 64 years 2001	61	58
% change for 25 to 64 (1991-2001)	14	13
% over 64 years 1991	16	16
% over 64 years 1996	13	20
% over 64 years 2001	16	21
% change for over 64 (1991-2001)	0	05
Median Age 2001	41	39

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

5.2.2 Economic Data

Bigcove demonstrated a better recovery in employment than Dorytown during the 1990s as suggested by the employment elasticity formula (Bigcove; 61% and Dorytown; 14%). Differences in employment recovery by community can be observed in graph below (Figure 5.2).



Figure 5.2 Number of residents reporting employment income from 1990 to 2001 for Bigcove and Dorytown

Source: Data from the Canada Customs and Revenue Agency, compiled in Community Accounts. Newfoundland and Labrador Statistics Agency, Government of Newfoundland and Labrador.

Changes in the number of businesses in each community were also considered to be an important indicator of economic development. As seen in the community selection data presented in Chapter 4, the number of businesses grew by three in Bigcove between 1991 and 2001 while it declined by two for Dorytown. This also suggested that Bigcove was more successful in Local Economic Development than Dorytown.

Other evidence supporting the greater economic success of Bigcove was the decrease of social assistance incidence from 1992-2001 by one case compared to an increase of 6 cases for Dorytown. In 2001, there were 17 cases of social assistance in Bigcove compared to 24 for Dorytown.

<u>Table 5.2 Incidence of receipt of social assistance for Bigcove and Dorytown (1992-2001).</u>

Year	Bigcove	Dorytown
1992	18	19
1996	21	18
2001	17	24
Change (1992-2001)	-01	06

Source: Community Accounts Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

In summary, both communities appear to have historically relied on the fishery and other seasonal work for employment. Background statistical data for the period ranging from 1990 to 2001 illustrates that Bigcove has lost fewer residents, and performed better in terms of employment recovery and new businesses. Since 1992, the number of social assistance recipients has remained relatively stable in Bigcove, while it has increased in Dorytown.

Note that the following Chapters will consider the historical patterns in the data reported in this chapter, and extend upon it by presenting data collected during this project's fieldwork.

Overview of Chapter 5

- Historical profiles of both towns revealed that they had been settled by
 Newfoundlanders, farming and subsistence activities played an important role
 alongside fishery related work, and the sealing disaster of 1914 was a significant
 event in the history of the communities.
- In Bigcove, curch activities were the main social activities in the community.

 Traditionally, wealthier residents such as fish harvesters or boat operators were located on one side of the harbour, while the less endowed residents who

- depended on them resided on the other side of the harbour. During the fieldwork, the church was in jeopardy of closing down. The volunteer fire department was the major volunteer association for the town. Though the fishery has declined significantly, most jobs were fishery-related (processing and harvesting).
- A historical profile of Dorytown revealed that several religions were active in the community and residents continued to thrive until the decline of the fishery that began in the late 1970s. The population steadily declined as residents moved away. In the 1990s, the community received national media attention when the lights were shut off due to an inability of the town to pay the power bill. The event prompted several leaders to become engaged in forming committees that set out to effect change in the declining community; a tourism committee with the goal of developing the town's resources for tourism and a recreation committee with the goal of saving a school from demolition and renovating it so that it could serve as a meeting place for the community, a Sunday school, a youth arcade, and a space for social gatherings.
- A preliminary examination of employment statistics and social assistance during
 the 1990s suggests that Bigcove had greater economic recovery during that
 decade than Dorytown. Dorytown had lost a greater proportion of residents than
 Bigcove. However, the two were similar in age composition.

Chapter 6: Community Well-Being Findings

As reviewed in Chapter 2, community well-being is comprised of many factors such as social, psychological, political, physical, environmental, and economic. Dimensions of community well-being were measured through the questionnaire survey, government statistics (where available), interviews and ethnography where applicable (see Chapter 3). This chapter considers the nature of community well-being as measured by each of these methods.

6.1 Questionnaire

The questionnaire survey contained the items of the Community Well-Being Questionnaire (Christakopoulou et al., 2001), supplemented by items measuring general well-being of residents, crime, employment, income, physical and mental health, and an open-ended question enabling residents to report anything they wish about their community (see section 3.3.2.3). These questionnaire findings are detailed below.

6.1.1 General Community Well-being Rating

Table 6.1 summarizes the residents' replies to the question concerning general well-being in the community. It shows that almost 90% rate their well-being as good, and very good or excellent. A Chi-square analysis shows that there was very little difference between the two communities.

Table 6.1 Ratings of residents' community well-being by community

Community Well-Being	Bigcove (%)	Dorytown(%)	
Excellent or Very Good	52.8	54.3	X ² =.072, p<.97
Good	34.3	34.3	,
Fair or Poor	12.9	11.4	

6.1.2 Community Well-Being Questionnaire Subscales

Table 6.2 details the mean scores for the various subscales of the CWBQ. ¹² It shows that both communities scored high on community spirit (positive relationships and ability to collaborate), place attachment, involvement in decision-making, environmental satisfaction (air and water quality, noise) and perception of safety (ability to walk alone at night, during the day). They also scored moderately satisfied on satisfaction with the built environment (cleanliness, parks), income sufficiency and social interaction.

Dorytown scored significantly higher on perception of employment availability, involvement in decision-making, satisfaction with the environment (air, noise, water) and perception of safety. Dorytown also scored substantially and statistically significantly lower in perception of crime in the community.

¹² Two-tailed independent sample t-test statistics were calculated to test for differences between the mean scores of each sample (t scores and p values are shown). Where sample distributions did not meet the criteria for normality (skewness and kurtosis between +2 and -2), a Mann-Whitney Rank Sum-U was calculated (z scores and p values are shown) as a non-parametric alternative to assess rank differences between the samples

<u>Table 6.2 Community well-being questionnaire subscales means, t-tests and Mann Whitney rank sum-U</u>

Community Well-Being					
Questionnaire Subscales	Com	munities	Statistic		
Rating Scale: 1 to 7*	Bigcove (x)	Dorytown(x)	t	р	
Community Spirit	5.90	5.91	0.07	0.95	
Social Interaction	4.44	4.07	1.67	0.09	
Income Sufficiency	4.07	4.22	0.51	0.61	
Employment Availability ¹³	2.21	2.80*	2.21	0.03	
Crime ¹⁴	4.08	2.37**	6.23	0.00	
			<u>z</u>	р	
CWB Place Attachment	6.33	6.49	0.54	0.96	
Decision-Making	5.36	5.83*	2.55	0.01	
Safety	6.58	6.81	2.68	0.007	
Satisfaction w/ Services and					
Facilities	4.71	4.65	0.61	0.55	
Satisfaction w/ Environment	5.41	5.99**	3.39	0.00	
Satisfaction w/ Built	4.97	5.06	0.09	0.93	
Environment					

p <.05, ** p<.01

All other subscales 1=Strongly disagree, 7=Strongly agree

Due to distinctions between items of the CWBQ subscales measuring satisfaction with community services (transportation, shopping, cultural facilities, medical services, schools, etc.) and environmental characteristics (traffic, air, water, parks, road conditions, etc.), a more detailed analysis was conducted in order to identify whether differences existed in satisfaction with particular services and other environmental characteristics. As presented in Table 6.3 (only statistically significant results are presented), Bigcove residents surveyed were dissatisfied with the water, while Dorytown residents were satisfied with greenery and parks and

¹⁴ This item was added by the researcher in order to complement the personal safety items

^{*}Satisfaction subscales, 1=Very unsatisfied and 7=Very satisfied Social interaction subscale, 1=Never and 7=Every day

¹³ This item also was added by the researcher in order to complement income sufficiency items

services from the local council, while Bigcove residents are more satisfied with the quality of lighting in the night time.

<u>Table 6.3 CWBQ community satisfaction subscale items means, t-tests and Mann Whitney rank sum-U</u>

Comn	nunities	Statistic		
Bigcove (x)	Dorytown (x)	t	p	
3.66	5.77**	7.54	0.00	
4.67	5.54**	3.46	0.00	
		<u>z</u>	р	
5.36	5.90**	-3.46	0.00	
5.80	4.69**	-3.82	0.00	
	3.66 4.67	3.66 5.77** 4.67 5.54** 5.36 5.90**	Bigcove (x) Dorytown (x) t 3.66 5.77** 7.54 4.67 5.54** 3.46 Z 5.36 5.90** -3.46	

^{**} p<.01

6.1.3 Economic Well-being Findings

The questionnaire survey contained many measures of economic well-being, these are summarized below.

6.1.3.1 Employment Status

Table 6.4 shows that for both communities, a similar proportion of residents reported being employed or self-employed (37.9%) and not currently employed (37.1%), with other residents reporting their employment status as retired (17.7%), homemaker (7.1%) or student (0.7%).

Table 6.4 Employment status by community

Employment Status	T	otal	Big	cove	Dor	ytown	Stati	stic
•	N	%	N	%	N	%	X ²	р
Self-employed	7	5.0	4	5.7	3	4.3	18.05	0.00
Employed *	46	32.9	28	40.0	18	25.7		3
Not currently employed	52	37.1	30	42.9	22	31.4		
Homemaker	10	7.1	5	7.1	5	7.1		
Retired	24	17.1	3	4.3	21	30.0		
Student	1	0.7	0	0.0	1	1.4		
Total	140	100	70	100	70	100		
Employed	53	37.9	32	45.7	21	30.1	13.82	0.00
Not employed	87	62	38	54.3	49	69.9		
Total	140	100	70	100	70	100		
Without "retired"								
Employed	53	45.7	21	42.9	32	47.8	0.27	0.60
Not employed	63	54.3	28	57.1	35	52.2		
Total	116	100	49	100	67	100		

Chi Squared analysis was calculated for differences between the two communities in all categories of employment, revealing a statistically significant difference; Dorytown contained a higher proportion of retired residents (30%) than Bigcove (4.3%) and correspondingly, a lower proportion of employed residents (25.7%) than Bigcove (40%). To further examine the differences in employment between the two communities, a Chi-Square analysis was conducted for differences in combined employed and unemployed categories, suggesting that employment in Bigcove (45.7%) was greater than in Dorytown (30.1%). However, the difference in employment between the two communities is negligible when removing retired residents from the sample. This finding is noteworthy due to the under-representation of residents aged 60 and over in the survey sample for Bigcove according to age profiles obtained from census data, as discussed in Chapter 3 (see Table 3.6).

Residents were also asked to indicate the number of months they were employed. When removing retired individuals from the analysis, 26.5% identified working for 12 months in Bigcove compared to 28.4% in Dorytown. The mean number of months employed was very similar for both communities (6.28 months for Bigcove and 6.40 months for Dorytown). With no statistically significant difference between the communities (t=.149, p=.882).

6.1.3.2 Main Source of Income

Table 6.5 shows that the largest source of income was wages and salaries, as reported by 62% of residents followed by EI (22.1%), CPP (14.3%) and Social Assistance (5.7%). Differences in main income sources between the two communities were not statistically significant, with the exception of CPP, which was higher in Dorytown (22.9%) than in Bigcove (5.7%) ($X^2=0.01$, p<0.00).

Table 6.5 Main sources of income as reported by survey respondents

	T	otal	Big	cove	Dory	town	Statis	stic
Main Source of	N	%	N	%	N	%	X ²	р
Income								•
Wages and Salaries	87	62.1	47	67.1	40	57.1	0.30	0.15
Employment Insurance	31	22.1	18	25.7	13	18.6	0.42	0.21
CPP	20	14.3	4	5.7	16	22.9	0.01*	0.00
Social Assistance	8	5.7	3	4.3	5	7.1	0.72	0.36

^{*}p<0.01

6.1.3.3 Income

Residents identified their household annual income though income categories. These categories were used to calculate income adjusted for household composition and median income.

Due to a near statistically significant difference in the average number of dependants per community as revealed a Mann-Whitney rank sum test (z=-1.91; p=.056), reported income was adjusted for household composition, taking into account the number of dependants. Table 6.6 contains the income adjusted household composition and median income category for each community. The difference in average income between the two communities reached near statistical significance (see Table 6.6), with Bigcove reporting greater income than Dorytown. Similarly, median income was higher in Bigcove than Dorytown.

Table 6.6 Income indicators by community as reported by survey respondents

Income	To	Total		Bigcove		town	Statistic	
X	SD	X	SD	X	SD	t	р	
Income adjusted for household composition	26,990	18,026	25,825	19,115	26,479	16,860	2.12	0.54

	Median	Median	Median		
Median					
household	30,000-35,000	35,001-40,000	30,000-35,000	N/A	N/A
income					
bracket					

6.1.3.4 Financial Situation

The difference between the financial self-rating of residents of the two communities was not statistically significant. See Table 6.7. However, over 10% of more residents in Dorytown rated their financial situation as "good", and approximately 10% more residents in Bigcove stated that they were "just getting by".

Table 6.7 Self-rating of financial situation by community

Financial	Total		Bigcove		Dory	town	Statistic	
Situation	N	%	N	%	N	%	X ²	р
Very good	28	20.0	15	21.4	13	18.6	2.78	0.43
Good	36	25.7	14	20.0	22	31.4		
Satisfactory	32	22.9	16	22.9	16	22.9		
Just getting by	42	30.0	24	34.3	18	25.7		
Can't cope	2	01.4	1	1.4	1	1.4		

Table 6.8 details the perceived change in financial situation over the past five years. It shows that just over 80% of residents in both communities felt their financial situation was the same or better than five years prior. There was a tendency for more people to report being better off in Bigcove than Dorytown, but the difference did not reach statistical significance.

Table 6.8 Five-year comparison of financial situation by community

Five-Year	Total		Bigcove		Dory	town	Statistic	
Financial	N	%	N	%	N	%	X ²	р
Comparison								•
Better off	32	23.7	18	26.5	14	20.9	1.74	0.42
About the same	77	57.0	35	51.5	42	62.7		
Worse off	26	19.3	15	22.1	11	16.4		

6.1.3.5 Food Security

Table 6.9 reports food security of residents as a proxy of economic well-being (Vozoris & Tarasuk, 2003), with approximately three quarters of all residents (73%) reported never going without the foods they want due to a lack of money. There was no statistically significant difference between the two communities.

Table 6.9 Food security by community

Food Security	Total		Bige	cove	Dor	ytown	Statistic	
	N	%	N	%	N	%	X^2	р
Often or	37	26.8	19	27.5	18	26.1	1.0	0.50
Sometimes								
Never	101	73.2	51	73.9	50	72.5		

6.1.4 Education

Table 6.10 shows that overall, over half of respondents graduated from high school or pursued a post-secondary education. Though more residents in Dorytown graduated from high school and also from a post-secondary institution, the difference between the two communities was not statistically significant.

Table 6.10 Highest level of education attained by community

Education	Total		Bigo	cove	Dor	ytown	Statistic	
	N	%	N	%	N	%	X^2	р
Less than Grade 10	33	23.7	15	21.4	18	26.1	4.20	0.38
Grades 10 to 12	30	21.6	13	18.6	17	24.6		
High School	30	21.6	18	25.7	12	17.4		
Graduate								
Some Post	16	11.5	6	8.6	10	14.5		
Secondary								
Post Secondary	30	21.5	18	25.7	12	17.4		
Graduate								

6.1.5 Health

Table 6.11 illustrates that overall, 70% of residents reported their health as being very good or excellent, which is greater than the 2005 provincial rate (62.4%). The proportion of residents reporting their health as being good was 22.9% and 7.1% of residents rated their health as fair or poor, which is lower than the provincial amount (11%). Though more residents of Dorytown reported their health as being very good or excellent, the difference was not statistically significant.

The majority of residents in both communities reported not having a disability (90%). Disability ratings did not differ between communities.

In terms of self-assessed weight, the greatest proportion of residents described themselves as slightly overweight (42.0%), followed by the right weight (37.7%), and overweight (20.3%). Though almost ten percent more residents in Dorytown reported being overweight, the finding was not statistically significant.

When asked to rate their level of life stress, 12.1% of residents overall rated it as quite a bit or extremely stressful, which is slightly lower than the provincial rating (15.2%) and much lower than the Canadian rating (23.2%). Fewer residents of Bigcove (10%) reported this level of life stress than in Dorytown (14%). The difference was not statistically significant.

Finally, when asked whether they have a friend that they feel at ease with, and whom they can approach for help (social support), the overall rate of "yes" responses was positive at 78.5%. A greater proportion of Bigcove residents responded yes (82.9%) than Dorytown residents (73.8%), however the difference was not statistically significant.

Table 6.11 Results for health questionnaire items for Bigcove and Dorytown

Health	To	tal	Big	cove	Dory	ytown	Statistic	
	N	%	N	%	N	%	X ²	P
Self Assessed Health Status								
Excellent	28	20	15	21.4	13	18.6	1.56	0.76
Very Good	70	50	32	45.7	38	54.3		
Good	32	22.9	18	25.7	14	20.0		
Fair or Poor	10	7.1	5	7.1	5	7.1		
Current Disability				10	January Wasser			
Yes	13	9.3	6	8.6	7	10	0.085	0.72
No	127	90.7	64	91.4	63	90	0.003	0.72
Weight								
Right weight	52	37.7	26	37.7	26	37.7	1.906	0.37
A little overweight	58	42.0	32	46.4	26	37.7		
Overweight	28	20.3	11	15.9	17	24.6		
Stress								
Not at all	20	14.3	10	14.3	10	14.3	0.713	0.87
Not very stressful	49	35.0	26	37.1	23	32.9	0.710	0.07
A bit stressful	54	38.6	27	38.6	27	38.6	58	82.9
Quite a bit or extremely	17	12.1	7	10.0	10	14.3	12	17.1
Stressful					4 37 - 1250.1	11		
Social Support								
Yes	106	78.5	58	82.9	48	73.8	1.623	0.20
No	29	21.5	12	17.1	17	26.2	1.025	0.20
110	1 J	21.5	12	11.1	. /	20.2		
General Health								
Questionnaire 12					w			
Number of "anxiety" cases	26	22.8	14	20	12	17.1	.189	.664

The GHQ-12 was scored by awarding 1 point if the item response represents a "problem" with anxiety / depression. A cut-off score for anxiety and depression on the GHQ-12 has previously been established at 2/3. That is, any 3 or more "positive" answers identify a probable case of this type of anxiety or depression. The number of individuals scoring above the cut-off was slightly higher in Bigcove (14) than in Dorytown (12). However, the difference was not statistically significant.

6.1.6 Health Behaviours

Table 6.12 outlines residents' responses to questionnaire items relating to health behaviours. Both communities were comprised of more daily smokers (26.8%) than the 2005 provincial rate of 20%, more occasional smokers (10.9%) than the provincial rate of 10% and less non-smokers (62.3%) than the provincial rate of 76%.

Table 6.12 Health-related behaviours for Bigcove and Dorytown

Health Behaviour	To	otal	Bigcove		Dorytown		Statistic	
	N	%	N	%	N	%	X ²	р
Smoking								_
Daily	37	26.8	21	30.0	16	23.5	0.90	0.64
Occasionally	15	10.9	8	11.4	7	10.3		
Never	86	62.3	41	58.6	45	66.2		
Exposed to 2 nd Hand Smoke								
Daily								
Yes	53	39.3	25	37.3	28	41.2	.211	0.65
No	82	60.7	42	60.7	40	58.8		
Drinking Alcohol								
Low	81	63.8	34	54.0	47	73.4	4.43*	.035
Moderate and Heavy	46	36.2	29	46.0	17	26.6		
Identified a regular physical								
activity								
Yes	129	92.1	66	94.3	63	90.0	0.888	0.53
No	11	7.9	4	5.7	7	10.0		
Made a change in the last year								
to improve health	X^2	SD	X^2	SD	X^2	SD	T	p
Yes	78	57.4	37	52.9	41	62.1	1.192	0.28
No	58	42.6	33	47.1	25	37.9		
*p<0.05								

Though smoking rates in the two communities did not differ with statistical significance, more residents in Bigcove reported being daily and occasional smokers than in Dorytown. Accordingly, more Dorytown residents reported never smoking (66.2%) than Bigcove residents (58.6%). Overall, 39.9% reported being exposed to second hand smoke

on a daily basis. That figure is substantially greater than the 2005 provincial rate (11.9%). A slightly smaller proportion of Bigcove residents reported being exposed to second hand smoke daily than in Dorytown – the difference was not statistically significant.

Residents' reported alcohol drinking was assessed using Health Canada's categorization of alcohol consumption. Low drinking is categorized as those who, whenever drinking alcohol, drink less than five drinks per occasion. Moderate drinking is categorized as those who drink five or more drinks per occasion, less than 12 times per year. Heavy drinking is categorized as those who drink five or more drinks per occasion, and do so 12 times per year or more. Figure 6.1 presents drinking rates for both communities and the province.

Alcohol drinking rates for the province of Newfoundland and Labrador in 2003 were as follows; 39% low, 27% moderate, and 32% heavy drinkers. In comparison, Bigcove had more moderate (31.7%) drinkers and less heavy drinkers (14.3%), while Dorytown had less moderate (18.8%) and heavy drinkers (7.8%). Both Communities had a greater proportion of "low" drinkers than the provincial average with 54% for Bigcove and 73.4% for Dorytown. A greater proportion of Bigcove residents reported being moderate or heavy drinkers (46.6%) than in Dorytown (26.6%). The difference was statistically significant (X²=437, p=0.035).

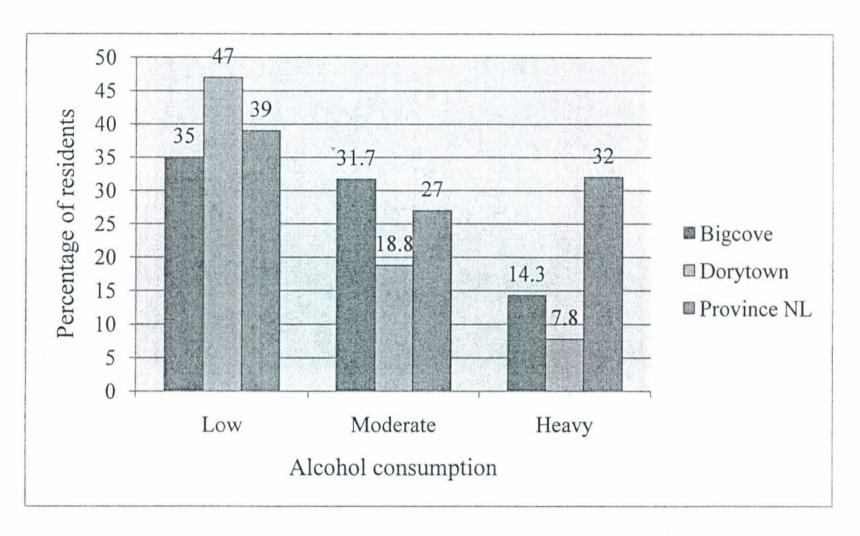


Figure 6.1 Percentage of low, moderate and heavy drinking for Bigcove, Dorytown and the province of Newfoundland and Labrador.

6.1.7 Community Well-being Open-Ended Question

The final question of the survey was open-ended, asking if residents would like to say anything else about living in their community." The question received 58 responses in total, 30 from Bigcove and 28 from Dorytown. Themes identified in the responses are described as follows.

- Love and pride for the community: Statements such as "My community is a great place", or "I love it here".
- Concern for youth: Residents expressed that they wish the towns had more employment or recreation opportunities for young people in the communities.
- Concern about crime/drugs in the community
- Concern about the availability of employment

Bigcove Responses

Of the 30 responses offered from Bigcove, several (13) expressed positive feelings toward their community:

Love it here, wouldn't want to have to leave it...

It's a great place for kids to grow up in.

I think my community is a great place. I enjoy living here.

However, the majority of respondents (23) had concerns with some aspect of the community.

Some (8) expressed concern with drugs and vandalism in the community:

Our community would be a better place to live if there was not such a big problem with drugs.

Young people moving away, things get beat up when they get built (too much vandalism)

There is a worrisome drug problem in the community. It would be better if it were fixed.

Others (7) were concerned about a lack of engagement and opportunities for youth:

I am very proud of my community, especially concerned about the youth in our area and wish that there could be some sort of recreational buildings to get youth involved.

The only thing I would like to change in my community is a lack of places to go for young people. There is a lot of drug and alcohol use among teenagers and it needs to change.

A few (3) commented on a lack of general community participation/volunteering:

With a little more work from community members, there could be a lot more improvement overall.

I find people don't have a lot of community spirit to help out on committees, but they tend to complain when things are not to their liking.

Everyone should stick together more and fight for what they want in their town.

Dorytown Responses

Of the 28 responses offered, the majority (22) contained positive comments about the community:

Very quiet, peaceful and overall a great place to live, and raise kids.

Loving it.

Nice place to live, quiet, great scenery.

I would like to say it's a very nice place to visit but a better place to live.

Several (5) expressed a desire for better or more employment opportunities:

I'd like to see more jobs.

I would say that it's a nice place that needs more work in the area to keep people from leaving the community.

I wish there was more job opportunities so people could work instead of being on social assistance.

Two recipients commented on the extent of participation and volunteering in the community:

People work good together (volunteer), that' why it's such a good place to live.

I like living here, there's good community spirit.

6.2 Government Statistics

Available government statistics were obtained relating to population decline, employment, income and hospitalizations as a supplement to the community well-being questionnaire, interview and ethnographic data. As stated in Chapter 5, some of the data

presented here extends upon the data presented in the previous chapter, by adding the data that became available after the communities were selected.

6.2.1 Population Decline

Figure 6.2 depicts population decreases in both communities since 1991. Between 1991 and 2006, Bigcove lost a higher proportion of its residents (38%) than Dorytown (34%) (see figure 6.1). Between 2001 and 2006, Bigcove has sustained a slightly greater decline in population.

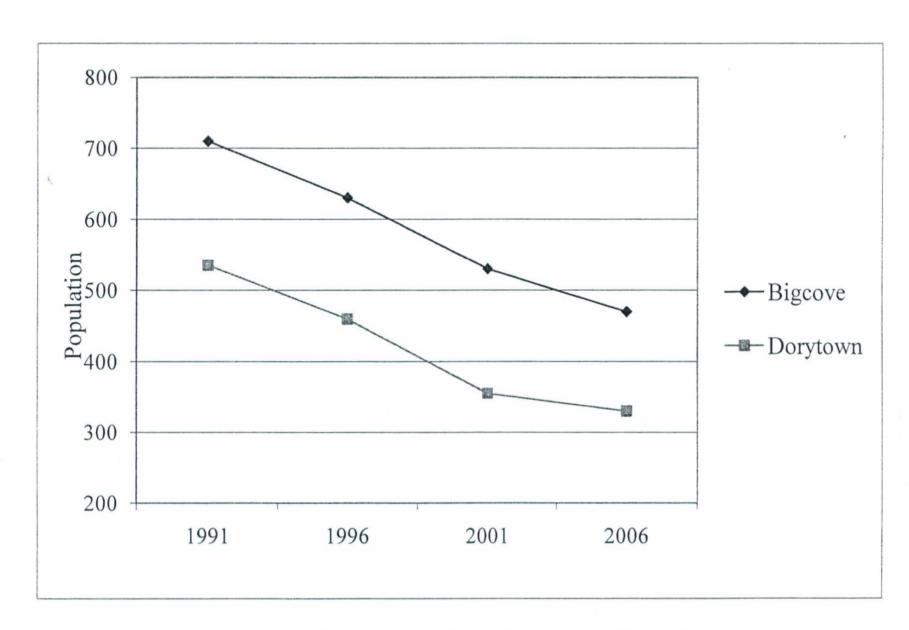


Figure 6.2 Decreases in population for Bigcove and Dorytown (1991 to 2006)

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

The age profiles of both communities are represented in Table 6.13. As previously stated, the age composition of the two communities was relatively similar in 1991. Over

the period of 15 years, both communities sustained decreases in the proportion of youth.

Comparative net changes in age composition can be described as follows. Between 1991 and 2006, Bigcove lost a greater proportion of its young people than Dorytown.

Dorytown gained a slightly greater proportion of adults than Bigcove, and Dorytown lost a slightly greater proportion of seniors than Bigcove. While the proportion of seniors

a slightly greater proportion of seniors than Bigcove. While the proportion of seniors remained relatively stable for Bigcove over the period, Dorytown sustained an increase followed by a sharp decrease in the proportion of seniors. In 2006, age proportions for both communities were relatively similar and median age was 48 for Bigcove and 47 for Dorytown, representing a similar increase in median age for both communities.

Table 6.13 Age distribution for Bigcove and Dorytown, Census data 1991 to 2006

	Comr	nunities
	Bigcove	Dorytown
% under 25 years 1991	39	36
% under 25 years 1996	33	29
% under 25 years 2001	26	20
% under 25 years 2006	22	24
% change for under 25	-17	-12
(1991-2006)		Charter of the second
% 25 to 64 years 1991	47	45
% 25 to 64 years 1996	55	48
% 25 to 64 years 2001	61	58
% 25 to 64 years 2006	60	59
% change for 25 to 64	12	15
(1991-2006)		
% over 64 years 1991	16	16
% over 64 years 1996	13	20
% over 64 years 2001	16	21
% over 64 years 2006	16	14
% change for over 64	0	-2
(1991-2006)		
Median Age 2001	41	39
Median Age 2006	48	47

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

6.2.2 Crime Statistics

In Table 6.14, data collected by the Royal Canadian Mounted Police (RCMP) between 2001 to 2004 indicates very few reports of crime relating to drug offenses (3 instances), followed by crimes relating to property damage under \$5,000 (14 instances), crimes against property (23 instances) and crimes against persons (22 instances). In general, rates of crime reports in Table 6.13 appear slightly higher for Dorytown than for Bigcove. However, due to the small populations, what seems like a substantial difference in crime rates may only represent a few instances. Raw numbers are in parentheses.

Vandalism-related data shows that reports of crimes against property increased in both communities in 2003, while none were recorded for 2004. In the case of property damage under \$5,000, no cases were reported for Bigcove with the exception of 2002.

The drug-related crime reports obtained further specified that in the case of the one drug-related offense in Bigcove in 2004, the individual was charged with possession of cocaine, while charges in Dorytown were related to possession of marijuana. Crime data were not available subsequent to 2004.

Table 6.14 Crime reports per 1,000 population and raw number of total crimes, crimes against persons, crimes against property, property damage under \$5,000 and drug-related offenses for years 2001 to 2004

Total Crimes per 1,0	00 population			
	2001	2002	2003	2004
Bigcove	29.63 (16)	42.59 (23)	62.96 (34)	45.28 (24)
Dorytown	45.95 (23)	71.05 (27)	88.89 (32)	120.00 (42)
Crimes Against Perso	ons per 1,000 popu	laton		
	2001	2002	2003	2004
Bigcove	7.41 (4)	0.00 (0)	3.70 (2)	7.55 (4)
Dorytown	2.70 (1)	7.89 (3)	8.33 (3)	14.29 (5)
Crimes Against Prop	erty per 1,000 pop	ulation		
9	2001	2002	2003	2004
	2001	2002	2000	2001

Property Damage Under \$5,000 per 1,000 population

5.41 (2)

Toperty Damage Cit	2001	2002	2003	2004
Bigcove	0.00 (0)	1.85 (1)	0.00 (0)	0.00 (0)
Dorytown	8.11 (3)	5.26 (2)	5.56 (2)	17.14 (6)

5.26 (2)

19.44 (7)

0.00(0)

Drug-Related Offenses per 1,000 population

Dorytown

	2001	2002	2003	2004
Bigcove	0.00 (0)	0.00 (0)	0.00 (0)	1.89 (1)
Dorytown	0.00 (0)	0.00 (0)	2.78 (1)	0.00 (1)

Source: RCMP Operational Statistics Reporting System, 2001-2004 obtained from Newfoundland and Labrador Statistics Agency, Government of Newfoundland and Labrador.

Note: Subsequent to 2004, community-level RCMP crime data is not available.

6.2.3 Community-Level Employment

Figure 6.3 details the proportion of the labour force that is reporting employment income for both communities.

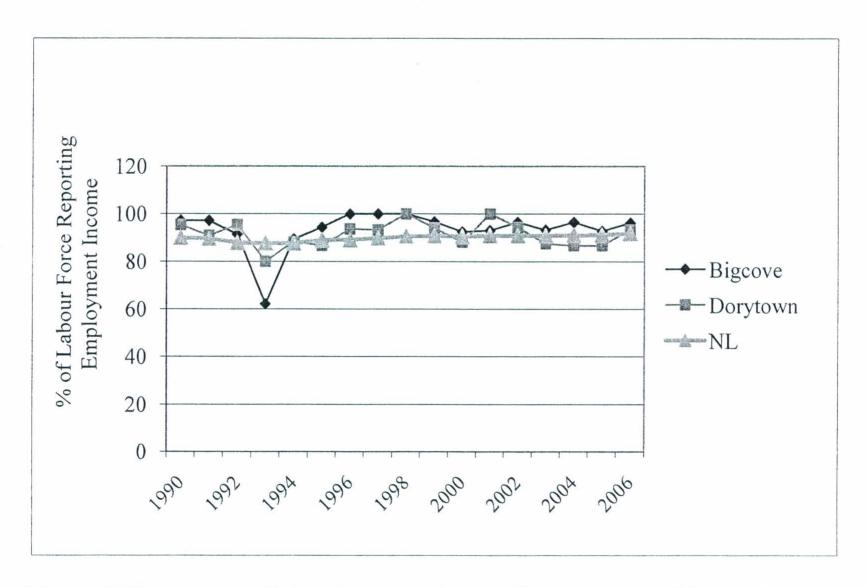


Figure 6.3 Percentage of labour force aged population (ages 18 to 64) reporting employment income between 1990 and 2006 for Bigcove and Dorytown

Source: Compiled in Community Accounts Unit, based on Canada Customs and Revenue Agency summary information as provided by Small Area and Administrative Data Division, Statistics Canada

Figure 6.3 seen above illustrates the proportion of labour force aged population reporting employment income. That is, they were employed at some point during the year. Both communities sustained decreases below the provincial level in 1993, with a 20% greater decline for Bigcove than Dorytown. Since then, the proportion reporting employment income increased to levels above 85% in both communities, with no substantial differences between the two communities since 2000. The percentage reporting employment income in Bigcove remained relatively high, fluctuating between 92% and 96% from 2002 to 2006. For Dorytown, the proportion remained stable at approximately 85% between 2003 and 2005, with an increase to 93% in 2006. For that year, both

communities had greater proportions of the labour force reporting employment income than the province of NL.

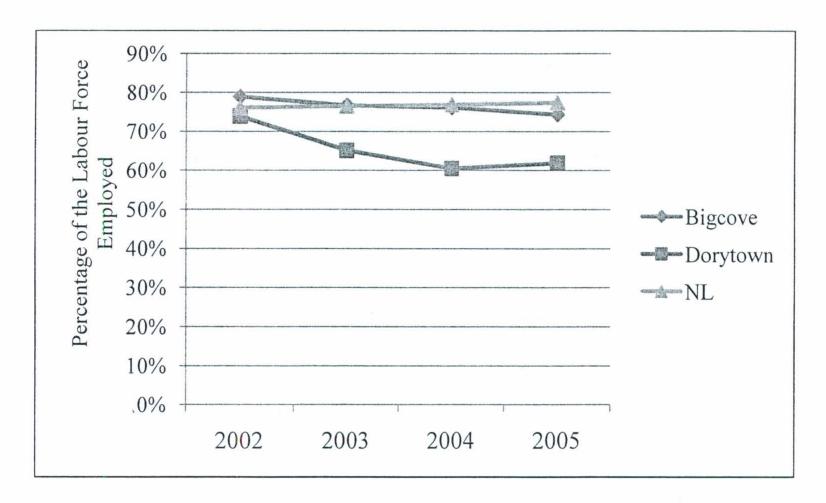


Figure 6.4 Percentage of labour force aged population (ages 18 to 64) employed during the entire year for Bigcove and Dorytown from 2001 to 2005

Source: Compiled in Community Accounts Unit, based on Canada Customs and Revenue Agency summary information as provided by Small Area and Administrative Data Division, Statistics Canada

Figure 6.4 presents the proportion of labour force aged residents (18 to 64 years old) that were employed during the entire year. A lower percentage reflects more individuals have difficulty finding employment when they become unemployed. Overall, the percentage employed slightly increased for the province of NL (76.1% to 77.4%), declined by 5% (79% to 74%) for Bigcove and by 12% decline (from 74% to 62%) for Dorytown. For the years 2003, 2005 and 2005, there was a larger difference between the two communities than presented in Figure 6.3 (receipt of employment income at any given point during the year). However, the statistics presented in Figure 6.4 were not available

for 2006. Figure 6.3 raises the possibility that there could have been an increase in employment for Dorytown residents that year.

Table 6.14 suggests that in both communities, receipt of Old Age Security and Social Assistance in 2006 have remained similar to previous years, while receipt of Employment Insurance has slightly decreased in both communities and receipt of Canada Pension Plan benefits has slightly increased.

<u>Table 6.14 Number of residents reporting transfer incomes from Old Age Security,</u> <u>Canada Pension Plan, Employment Insurance and Social Assistance</u>

Bigcove							
	2001	2002	2003	2004	2005	2006	
OAS	80	80	80	90	90	90	
CPP	90	90	100	100	110	120	
EI	210	200	210	210	200	190	
SA	50	50	50	50	50	50	

Dorytown						
Transfer Income	2001	2002	2003	2004	2005	2006
OAS	60	60	60	70	70	70
CPP	70	70	80	80	80	90
EI	110	110	100	100	110	100
SA	50	40	50	50	40	50

Source: Compiled in Community Accounts Unit, based on Canada Customs and Revenue Agency summary information as provided by Small Area and Administrative Data Division, Statistics Canada

6.2.4 Median Income Statistics

As can be seen in Table 6.15, for all family types, median income is slightly higher in Bigcove than it is in Dorytown. For the province of NL, median income for all family types was substantially higher at \$38,100.

Table 6.15 Median income data for 2006 per community by family type, as obtained through the Community Accounts website, Newfoundland and Labrador Statistics Agency

Family Type	Bigcove	Dorytown
	Median Income	Median Income
Family couples	41,900	38,700
Lone parent families	22,500	N/A
Non-family persons	17,500	15,000
All family types	27,700	26,600

Source: Community Accounts: 2006 Newfoundland and Labrador Statistics Agency

Educational Attainment

Census data from 2006 indicates that the proportion of high school graduates was 20% for Bigcove and 21.8% for Dorytown, while the proportion of graduates with any post-secondary certificate, diploma or degree was 33.20% for Bigcove and 30.9% for Dorytown. Rates of post-secondary educational attainment for both communities are substantially lower than that of the province (70.5%).

6.2.5 Health Data: Morbidity (Hospital Separations)

Table 6.16 outlines morbidity data or hospital separation data available for the years 2001/02 to 2004/05. A hospitalization or hospital separation is defined as being admitted to a hospital for care extending over one day (e.g. the data would not include admittance for day surgery). Data for cause-specific hospitalizations were not available because of low case numbers (under five cases).

Table 6.16 Volume and crude rate of hospitalizations for selected causes, residents of Bigcove and Dorytown, 2001/02 to 2004/05

Hospitalizations		2001/02	2002/03	2003/04	2004/05	
D'	Volume	47	52	48	68	
Bigcove	Crude Rate 8752.3		9942.6 9356.		13545.8	
D	Volume	47	42	33	27	
Dorytown	Crude Rate	12806.5	11898.0	9677.4	8181.8	

Source: Clinical Database Management System 2001/02 to 2004/05, Newfoundland and Labrador Centre for Health Information

Note: For reasons of confidentiality, cell counts of less than 5 have been suppressed.

The number of hospitalizations presented in the tables does not necessarily represent unique patients; a unique patient may have had more than one hospitalization within a fiscal year.

As seen in Figure 6.5, total hospital separations increased over the four-year period for Bigcove while they decreased for Dorytown. These were not age-standardized because the age distribution was quite similar for both communities, according to 2006 Census statistics as seen previously in this chapter. There seemed to be a growing rate of hospital separations for Bigcove, compared to a declining one in Dorytown. Hospital separation data for following years was not available.

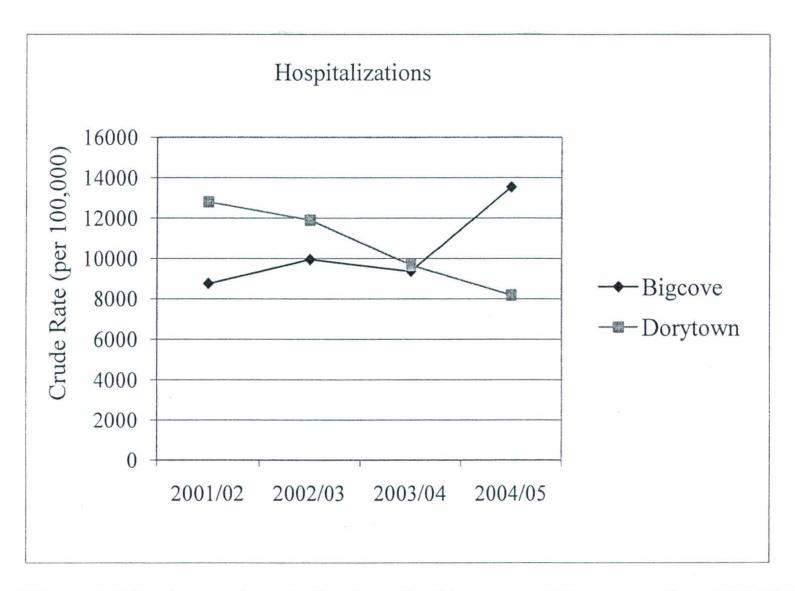


Figure 6.5 Crude-rate hospitalizations for Bigcove and Dorytown from 2001/02 to 2004/05

Source: Clinical Database Management System 2001/02 to 2004/05, Newfoundland and Labrador Centre for Health Information

Data from Table 6.17 illustrate cause-specific hospitalization rates by community for three periods (1995-1999, 2000-2002 and 2003-2005). The data allows for provincial comparisons. Dorytown data for the last period was not available.

The two communities experienced less all-cause hospitalizations than the province as a whole. All-cause hospital separations appear to be higher for Bigcove than for Dorytown. For the two last periods, circulatory and respiratory specific hospitalizations appear to be higher in the communities than for the province. Rates of circulatory hospitalizations in both communities increased with each period.

Table 6.17 Hospitalization rates per 1,000 for Bigcove, Dorytown and the province of Newfoundland and Labrador for periods 1995-1999, 2000-2002 and 2003-2005.

	19	1995 to 1999		20	2000 to 2002		20	003 to 2005	ignativ.
	Bigcove	Dorytown	N.L	Bigcove	Dorytown	N.L.	Bigcove	Dorytown	N.L.
Hospital Separa- tions	114	103	125	112	110	120	111	NA	117
Circula- tory	14	18	19	18	21	18	19	NA	16
Respira- tory	14	20	13	15	13	11	19	NA	11
Neopla- sms	6	7	8	6	9	8	9	NA NA	8

Source: Compiled by the Community Accounts Unit based on information from the Newfoundland and Labrador Centre for Health Information, Clinical Database Management System. Newfoundland & Labrador Statistics Agency Government of Newfoundland and Labrador

Note: Hospital separation data for Dorytown was unavailable for years 2003 to 2005.

The number of hospitalizations presented in the tables does not necessarily represent unique patients; a unique patient may have had more than one hospitalization within a fiscal year.

6.2.6 Mortality

Mortality data were available at the community level for the years 2001 to 2003 (see Table 6.18).

Table 6.18 Volume and crude rate of mortality for residents of Bigcove and Dorytown, 2001 to 2003

Dea	iths	2001	2002	2003
D:	Volume	7	<5	8
Bigcove	Crude Rate	1303.5	-	1559.5
D	Volume	6	<5	<5
Dorytown	Crude Rate	1634.9	-	-

Source: Statistics Canada Annual Mortality Files 2001 to 2003, Newfoundland and Labrador Centre for Health Information

Note: For reasons of confidentiality, cell counts of less than 5 have been suppressed.

Mortality appears to be quite low in both communities. In three cases, the mortality data was not available because of low case numbers. For the same reason, cause-specific mortality data was unavailable in most cases. Mortality data by period as compiled by Community Accounts was not available due to low mortality figures in both communities by period.

6.3 Interview and Ethnographic Data

6.3.1 Community Spirit (Working Together)

Bigcove

During informal conversations, community leaders in Bigcove noted a general decline in social closeness. Two community leaders stated "the social closeness is gone" and "it's like people live closed off lives" and "no one seems to have respect for each other."

Others noted that recently, social activities have ceased due to a lack of volunteering:

The Firettes have Festival Day, where they have booths, spin the wheel, surprise boxes, etc. They volunteer to raise money for the fire department but for other things too; they give money to the community for the Christmas parade, etc. (make lootbags). Recreation organizes the parade. They didn't have it last year though.

The festival day was threatened because of a lack of volunteers, and has not taken place in subsequent years. Similarly, other activities are not continued regularly such as the Christmas parade, Christmas hamper fundraisers, etc.

Dorytown

During interviews, most Dorytown residents talked about volunteerism to overcome past challenges in order to provide valuable resources or services to the community. A

previous town councillor describes the volunteerism that has brought resources to the town:

The school was about to be bulldozed down. Scott went on to the committee in July '98. Terry went up and did all volunteer work, and laboured for about 2 or 3 years. The projects started to come out. The town applied to Nicole Smith, the HRDC employment benefits officer at [large regional centre], did the fundraising and got the money.

The rec centre is also used every Sunday morning for Sunday School. It was successful because everyone pulled together.

A town councillor described the effect of volunteerism on obtaining key services for the residents:

The town council had trouble with pumps coming from the pond. Council worked on it on their own to fix it to save the town money in order to keep other services going.

A member of the tourism volunteer group describes the volunteering to build or fix the municipal park, and impact on the ability to have a festival every year:

The Festival started in '98. People from [the neighbouring town] volunteered in the festival too. There was no service water and sewer. Since then all the town came together and volunteered to fix up the municipal park. The supplies came from the JCP projects but all the labour was volunteer. The rec centre did up a beer tent because there was no place to serve beer. Terry built a tent, applied for \$ from Molsons and Recreation paid for the materials. It's now used for washrooms but beer was served a couple of years.

Other volunteers stated:

In terms of volunteerism, there are about 22 people who serve on committees in the community.

Most of the success in this town has taken lots of volunteer time over the years.

Volunteer work and cooperation from government and between the organizations in the community. You always gotta come up with your share but we did the fundraising and got it.

6.3.2 Crime/Safety

Bigcove

Residents of Bigcove verbally expressed concern about drugs in the community, describing that 10 to 15 year old children were being offered drugs such as crystal methadone, among other very addictive substances. They also stated that the local authorities had been made aware of the problem. However, lack of evidence precluded them from making criminal charges. Some even stated that when confronted by concerned parents, the persons responsible responded with threats to the children.

Residents of Bigcove mentioned problems with vandalism in the community:

T: That's why they moved the playground here now by the town hall, and have a big fence around it. It was over by the baseball field out behind the old school, but it was getting vandalized all the time.

C: I get up one morning and I seen those fellas. They're up too early I thought. So I watched them, all of a sudden, the bus shelter was gone. The bus shelter that the recreation, we, raised money and built and put it there for the kids to get in, and we had 'em all over the harbour right? Everywhere there was a bus stop there was a shelter. And the shelter is gone, I see those three young fellas anyway, there they is bringin 'em out of the woods, pieces of plywood they were gonna build a camp.

S: We used to have a dance for teens up at the town hall. That's where we have everything. But the kids are getting too rough now. We wouldn't want a chair to go through the wall so we don't have that anymore.

Dorytown

In contrast, residents of Dorytown commented on lack of vandalism, and perceived youth involvement:

M: For the young people you know, there's not a whole lot for them to do, Recreation has an arcade and they're struggling with that you know trying to keep it open. Having said that, you know there's no vandalism, like there's nothing being broken in the night like our signage we got around town, there's

nothing being destroyed, the plants we plant in the summertime, there's not even one being pulled out that I've been aware of. In the summer time, the young people sit around across from the tourism bldg with the plants all around and to my knowledge there's never been a thing done, to the building or to one plant you know. I guess in many ways the youth takes pride in it as well and I think that's another challenge for us you know getting the youth more involved.

F: Apparently there's some youth projects that you guys are looking into.

M: Well we've got one approved now actually called youth skills link. So we've got six people coming on next week for that one, which will be at risk youth, not employed hopefully get them back into the work force. But other than that everyone is comfortable in this town. I don't lock my door. I go out and leave the doors unlocked. Now whether that's a false sense too. I don't know.

6.2.4 Economic Well-being

Bigcove and Dorytown residents indicated that fishery-related work was becoming more difficult to secure. One Dorytown resident stated:

The government said they was gonna look after displaced fish plant workers. But I don't know who he meant by fish plant workers, 'cause we certainly weren't looked after, I didn't get any hours at all this year. I didn't get any. What am I supposed to do at this age eh? Last year I got 54 and then went on the hours to do up the lodge, and that's how I got my hours last year.

Bigcove

Residents of Bigcove explained that many residents are employed in fishery-related jobs.

Well we've got FPI but we've got people working in [other neighbouring community with fish processing plant] too see? There's also a seal operation up here, some work there. You got all that on the go, you got the shrimp and the seal plant in Catalina, and the crab plant in [neighbouring community with fish processing plant]. There's a few now not that many but a few who work there in [other neighbouring town]. You could say 35-40 people up here work up in [the main] plant there? Shrimp plant.

During informal conversations, some residents in Bigcove also stated that their hours at the fish plant were decreasing.

Dorytown

A Dorytown resident spoke of the uncertainty of the employment situation for seasonal projects:

May: Yes and like before at least we had hours to qualify for EI but now we don't even have hours so like, what are we gonna do?

Grace: I mean after that, is there gonna be anything for us before this finishes? Right?

However, residents of Dorytown expressed gratitude for tourism-related jobs that were created through restoration projects, heritage tours, etc.

Ma: Well the money, experience...is good. But it would be better if it were insurable earnings.

T: Well we get what? 594 every two weeks top up.

Ma: Well you go to [neighbouring town] and work for 6 bucks an hour and you wouldn't get 600 dollars every two weeks. For six dollars an hour fourty hours a week, by the time you get your takes taken out of that, you've got about 200 dollars a week. So I mean top up is good (compared to some alternatives).

G: The only thing now when they're finished, we're back to square one again. When there's hours (at the plant) at least you know you've got something coming in thereafter. Right?

6.4 Community Well-being Discussion

The aim of this chapter was to describe the character of community well-being in the two communities – Bigcove which had evidence of economic recovery and Dorytown where there was less evidence of such recovery.

6.4.1 Profiles of Community Well-being

Some aspects of well-being appeared to be better than others for the communities.

In terms of rating the general well-being of residents in the community, most survey participants of both communities offered positive responses. Although not statistically significant, slightly more residents in Dorytown described their well-being as excellent or very good.

Survey participants indicated that both communities were very high in place attachment and moderately high in community spirit and social interaction. However several Bigcove residents mentioned a lack of community spirit and volunteering in their openended survey responses, and interviewed community leaders of Bigcove felt that the "social closeness" had declined, which is consistent with effects of economic decline on social processes as described by Fowler and Etchegary (2008).

Frohlich, Ross and Richmond (2006) suggested that, greenery and parks, and good support services are health enablers. Survey findings indicated that residents in both communities were very satisfied with the environment in general, services from council and lighting at night. In terms of specific aspects of the built environment, Bigcove survey participants were dissatisfied with the quality of their water. Dorytown was also significantly more satisfied with its greenery and parks and services from the local council than Bigcove but less satisfied with lighting in the night time.

Democratic processes and citizen engagement are commonly cited as determinants of well-being (Christakopoulou & Gari, 2001; Hancock, Labonté and Edwards, 1999). Both communities' survey participants were moderately satisfied with their involvement in decision-making processes. However, Dorytown residents rated their involvement in decision-making as statistically significantly higher than that of Bigcove. The survey

finding was supported by fieldwork. For example, Bigcove was experiencing difficulty in obtaining nominations for council representatives, while this problem did not exist in Dorytown. Also volunteers with the Tourism Group specifically expressed their satisfaction with the democratic nature in which decisions were made. Experts in community well-being argue that democratic practices play an important role in empowerment for improved well-being (Christakopoulou et al., 2001; Hancock et al., 1999).

Residents of both towns rated their communities as safe. When asked about the presence of crime in the community, Bigcove residents reported the presence of crime in the community, while Dorytown residents reported no crime in their community. Openended question responses about living in their community revealed that Bigcove respondents were concerned with drug and vandalism problems in the community. Comparatively, interviewed Dorytown residents and external government representatives commented on the degree of safety in the town and absence of vandalism. RCMP crime reports data failed to support the claims made by Bigcove residents in the survey questionnaire, and also in interviews and informal conversations, (crimes against property, property damage under \$5,000 and possession of controlled substances). However, it is possible that drug crimes went largely unreported due to threats to residents by the offenders, as suggested during informal conversations with residents. Therefore, the crimes would not appear in the RCMP data. The alleged possession of cocaine in Bigcove offers some support to claims that "harder" drugs were circulating in that community. With the exception of the RCMP data, perception of property damage and drug-related crimes in Bigcove is consistent with Sooman and MacIntyre (1995) and

Raphael and Winter-Ebner (2001) findings for economically deprived communities. Fowler (2001), in his study of communities in decline, also noted the presence of vandalistic crimes in some communities, suggesting them to be motivated by frustration-aggression. In contrast, Dorytown youth seemed to be engaged by positive role models and no vandalism was experienced, which points to the importance of positive influences for young people. Findings suggested that in Bigcove, and to a much lesser extent in Dorytown, there is a concern that youth do not have enough to do. This is consistent with other coastal research that argues that youth are at risk when they do not have the opportunity to develop their talents and skills (Ommer, 2007). Hirschi's (1961) theory of social control holds that a lack of involvement in delinquent activities is associated with the influence of positive adult role models.

Community safety enables social activity, participation and outdoor exercise for increased well-being (Frohlich et al., 2006). Similarly, fear of crime has important consequences for community well-being (NEF, 2009), which may partly explain the frequency with which Bigcove residents mentioned it in interviews and during the ethnographic fieldwork.

Ethnography and interview findings also suggested that youth engagement in community projects is an important dimension of community well-being for residents in both communities. This suggests that further research on youth in rural communities could explore the impact of youth involvement on dimensions of community well-being such as crime and young people's future involvement in community development. Other recent research about youth in rural coastal areas has suggested that although young people have positive feelings toward their communities, they intend to leave their towns to pursue

post-secondary education and many doubt they will be able to return to their towns due to a general lack of opportunity there (Fowler, 2008; Ommer 2007).

Satisfaction with aspects of one's community has been found to be a predictor of stress, self-reported health and emotional health in recent research on similar coastal communities to the ones studied in this project (Ommer, 2007).

Demographic data suggests that Bigcove has lost a greater proportion of its residents since 1991 than Dorytown. Though the population decline was greater for Dorytown between 1996 and 2001, the population decline of Bigcove has been greater than Dorytown between 2001 and 2006, particularly for younger residents. This suggested that more young Bigcove residents moved away in the four years leading up to the study.

In terms of economic well-being indicators, residents in both communities rated their incomes as sufficient. Dorytown residents rated employment opportunities as greater than Bigcove residents. When asked about their employment status, a greater proportion of Dorytown survey respondents were retired than in Bigcove. However, as reported in Chapter 3, census data revealed the age distribution to be similar in both communities, suggesting an under-sampling of retired residents in the Bigcove survey sample. Employment statistics obtained from government sources revealed that in 2006, there was little difference between the communities in percentage of the labour force reporting employment income. However, in the previous year, the overall proportion of the labour force aged residents (18 to 64 years old) employed during the entire year was 12% greater in Bigcove than in Dorytown. In general, employment data appears to be slightly

more favourable for Bigcove. A more detailed analysis of employment in both communities is presented in Chapter 7.

With regards to income, most survey respondents from both communities stated that their financial situation was about the same or better than five years prior and that they never went without the food they desire due to a lack of income. When rating their current financial situation, more respondents in Bigcove than in Dorytown reported just getting by, and more residents in Dorytown reported incomes as "good". The greater proportion of retired people in Dorytown in receipt of CPP and fixed income supports could have affected their ratings positively.

Median household income of all survey respondents was lower than that of the province in 2006, as reported through Census data. Income data obtained from the survey and government statistics suggested that household income was only very slightly higher for Bigcove than Dorytown. Government data sources suggested that between 2001 and 2006, receipt of income from transfer sources such as employment insurance and CPP was slightly increasing, while receipt of Social Assistance and OAS was relatively similar to previous years. In 2006, there were decreases in receipt of EI for both communities, which can either reflect in a shorter duration of seasonal work or reduction in seasonal jobs.

Ethnographic data and interviews revealed that individuals who were employed in fishery-related work in both communities and in tourism projects in Dorytown were concerned and uncertain about their future. Feelings of job insecurity have been suggested to influence physical (Mattiason et al., 1990) and mental (Sverke, 2002) health outcomes.

Education data obtained from the survey suggests slightly higher educational attainment levels for Bigcove. However, census statistics suggest educational attainment to be quite similar in both communities. Inconsistency with the survey data was likely caused by the under-sampling of seniors in Bigcove. According to Census data, rates of post-secondary graduates were substantially lower in Bigcove (33.20%) and Dorytown (30.9%) than for the province in general (70.5%), as shown in other research on coastal communities (Ommer, 2007). It is possible that the most educated residents were the ones that were better able to migrate in search of better employment opportunities. In that sense, those individuals possessed greater "resources" and might have had access to "opportunities" (Frohlich, Ross and Richmond, 2006), potentially improving their own health outcomes, but not substantially contributing to the well-being of their communities of origin.

To summarize findings with respect to questions of individual health for both communities relative to comparable provincial statistics, a greater proportion of residents rated their health as "excellent or very good" than the provincial rate. The finding supports other coastal research suggesting that in spite of the multiple challenges that often face these towns, residents tend to rate their health better than provincial and national averages (Ommer, 2007), a finding that has was suggested to reflect the resourcefulness and resilient nature of coastal people. Accordingly, a smaller proportion of residents rated their life stress as "quite a bit or extremely stressful" than the national rate, which is consistent with other coastal Newfoundland research (Ommer, 2007). In effect, the Coasts Under Stress project suggested that the remarkable social cohesion of

coastal rural residents acted as a buffer or moderator of the other stressors associated with ecological and economic restructuring.

There were also higher rates of daily and occasional smokers and moderate drinkers than for the province, consistent with research on the linkage between lack of employment and the two behaviours (Khlat, Sermet & Le Pape, 2004; Montgomery et al., 1998).

It appeared that residents of the two communities did not differ significantly in their self-rated health status, weight ratings, disability/mobility, smoking, identification of a regular physical activity, making a healthy change in the last year, and mental health (anxiety and depression, and general stress). Though the differences were not statistically significant, there was a tendency for Dorytown residents to report better self-rated health.

Dorytown residents tended to smoke less, and experience slightly more exposure to second hand smoke. Bigcove had more heavy and moderate drinkers than Dorytown, consistent with research linking unemployment with alcohol abuse (Khlat et al., 2004). Alcohol abuse findings for Bigcove appear to be more consistent with literature on the effects of community economic decline (Khlat et al., 2004; Conger, 1991).

Overall hospital separations tended to be lower in both communities than for the province. In contrast, circulatory and respiratory separations since 2000 were higher than provincial rates, consistent with Ommer (2007) findings relating to the effects of economic decline on cardio-vascular health and the theory that economic strain may be linked to cardio-vascular health. Rates of cardio-vascular hospital separations appeared to be increasing for Bigcove in the last period of measurement (2003-2005). In general, hospitalization rates appeared to be declining in Dorytown, but on the rise in Bigcove.

It is worth noting that statistical modelling in recent coastal research with similar populations (Ommer, 2007) suggested that one's ratings of their financial situation and employment were significant predictors of greater stress levels and emotional health. Post-secondary education was a significant predictor of self-rated health and emotional health. Smoking and exercise frequency were significant predictors of self-reported health and stress, and alcohol consumption was a predictor of self-reported health, with all relationships in the expected direction. This supports the importance examining these variables within this project, and raises the possibility that differences found between the communities may be associated with physical and mental health.

6.4.2 Utility of Methods for Studying Community Well-being

All methods used proved beneficial in the study of community well-being. Where available, government statistics were useful for providing an indication of well-being in the communities and for some variables, were the most reliable data source. For example, demographic data showed the extent of population decline and employment statistics based on tax filer data provided a more reliable source for employment information than the survey would have. However, the survey allowed for gathering data on the proposed community well-being dimensions, particularly where no government data sources were available, or where sampling in those types of surveys would be limited. Residents' perceptions of the communities in which they live provide particular insights on the ways in which they experience them. Survey findings provided some understanding of this but the interactions between the researcher and the community members over the six-month period of fieldwork encouraged information sharing that may not have otherwise occurred. For example, many residents of Bigcove felt

comfortable enough to share their concerns about drugs and vandalism. The information provided useful context for the interpretation of safety/crime survey findings.

One challenge in interpreting these well-being findings is that comprehensive well-being data for the two communities is not available for the period preceding the fishery decline. Where available, provincial statistics provided some context or comparison for the relative status of well-being for these two communities.

Overview of Chapter 6

- Community well-being was examined through survey methods complemented by interviews and ethnographic data, and crime, health and employment/income government statistics.
- When surveyed about characteristics of their community, residents of Dorytown reported greater employment availability in the region, greater ability to be involved in community decision-making, less crime and greater safety. Dorytown residents were also more satisfied with water quality, greenery and parks and services from the local council. In contrast, Bigcove residents were more satisfied with adequacy of lighting in the night time.
- Crime and safety findings in the CWBQ were supported by responses to an openended question at the end of the questionnaire; crime in Bigcove seemed to be
 related to drugs, vandalism and a concern for youth. Crime data obtained from the
 Royal Canadian Mounted Police did not show drug-related crimes and vandalism
 to be greater in Bigcove, as reported by residents in the questionnaire and during
 the interviews and ethnographic data.

- There was no statistically significant difference between the two communities in educational attainment. Both communities had a much lower proportion of post secondary graduates than the province.
- In spite of Bigcove having experienced greater economic resilience in job recovery in the 1990s as seen in the community selection, the two communities appeared to be similar in many employment and income indicators years according to survey questionnaire measures (number of months employed, income adjusted for household composition) and some available community-level statistics (proportion of population reporting employment income and median income). The employment data slightly favoured Bigcove because tax filer data leading up to 2005 showed that a greater proportion of residents were employed the entire year. Surveyed residents in Dorytown reported greater employment opportunities in the region.
- The two communities did not exhibit a statistically significant difference in most health items of the questionnaire. Bigcove reported more heavy and moderate alcohol drinking than Dorytown. Also, annual data on hospital separations revealed a recent increase in hospital separations for Bigcove and a decrease for Dorytown. Hospital separation data available for three periods since 1995 suggested that both communities had higher respiratory and cardio-vascular hospital separation since 2000, lending support to Ommer (2007) findings and the theory that economic strain has an impact on cardio-vascular health.

Chapter 7: LED Findings

As reviewed in Chapter 2, LED indicators can include net job creation and type of jobs created (seasonal, full-time versus part-time), community control, sustainability of employment and economic diversification. LED was measured through interviews, ethnography and available government statistics (See Chapter 3). This chapter considers the nature of LED in the two target communities as measured by each of these methods.

7.1 Interview and Ethnographic Fieldwork Data

As stated in Chapter 3, Bigcove was selected because of its greater employment recovery during the 1990s than Dorytown. As such, it was expected to have more LED activities during the last decade. The following is a description of ethnographic fieldwork and interview findings for local economic development in the two communities.

7.1.1 Type of Economic Growth Since the Fishery Downturn

Bigcove

Initial conversations with residents suggested that employment recovery of Bigcove was primarily due to the re-opening of a fish processing plant in the mid-1990s. A cod processing plant that was closed down after the fishery moratorium was re-opened to process shrimp and other species. Some residents thought the decision to re-open the nearby fishing plant was motivated by the fact that the plant was relatively new, while others felt political factors were at play. The call back to work was based on seniority with the company, which happened to favour residents of Bigcove – approximately 40 residents were employed there in 2006. One community leader explains:

A: The plant in [Neighbouring Community] employed 1400 people. Now 40 or 50 people from [Bigcove] work there. The Plant closed in [inaudible] but re-opened in 1998 and the top 100 or so from the seniority list was re-called to work. [Bigcove] was fortunate to have almost half of them there.

Though some residents left the community in the decade after the fishery moratorium, more were enabled to stay for the seasonal work opportunity than in Dorytown.

Dorytown

After sustaining substantial declines in population and employment during the 1990s, remaining residents volunteered resources to develop a tourism strategy for the town supported by multiple government-funded projects between 1998 to the time of data collection. The projects were beginning to produce seasonal economic spin-offs such as accommodation operations, tea and craft shop, a restaurant and tours.

The former mayor offered his own account of that time. He describes that the town council had not been active in trying to obtain available government funds for economic development, and comments that residents were not engaged.

J: I said (to the government representative) "What?! You mean to tell me that the [our town] isn't applying for this money (government grants)." He said "we were told to stay out of it". They want it they could apply for it. From there to years ago when I came on the scene, I sat down in '97 when the first elections rolled around and I sat down for a couple of years before that prior to that and I sat down and talked to my wife and said "My God, the people here in [Dorytown] isn't like when we moved there, is not together, like they're apart. It's not the same town. I said in order to get together there's gotta be a shake up. I think this time around when the municipal election rolls around, I'm gon'to run for mayor, I think.

He then explained that with the support and encouragement of many friends, he ran for mayor and called for the formation of two committees; a recreation committee and a tourism committee.

The two community groups were successful in obtaining funding and support from government agencies and other sources. Tourism Group leaders described the natural, physical and financial resources available for tourism development (beach, park, puffin sanctuary, money for a committee).

M: And I think too you know, I know on the beach in the summer time, I knew some things that were happening in other communities with the festivals, and I kept thinking you know my God we've got such nice infrastructure that we've got this beautiful nice park and beach, we should be having a festival, you know if anyone's having a festival, we should be with this beautiful area. ...So when the [new] council went ahead and there was some talk of money to form this committee, so they put out a request then and more people came on board. ...like you know the root cellars, the vegetables the berries everything. That's what we wanna do. The puffin site is another thing we wanted to promote but most things are around that theme.

C: Basically our municipal park, we knew we had one of the best natural municipal parks, with the beach. So we looked at Sandy beach, equal or better than any beach in the province and plus we had one thing going for us too, ...in sand capelin won't spawn so they don't come up so we're blessed the fact that we don't have the stink of capelin rotting on our beach, it's clean and we looked at that as our key tourism attraction. Then there was...our puffins, we knew we had the closest view of puffins from land anywhere in the world and we pretty well knew that and the colony was increasing and they were so close (to the shore) we knew that it was going to be an instant attraction. And of course we looked at our root cellars, and there were so many tourists and people started asking you know, what were they and how were they built and you know we people asking all kinds of questions like you know are there people living in them.

Tourism Group residents also explained the importance of the leadership and volunteering in the community, and that it was instrumental in initiating the development. They also spoke of the connections they had with funding agency representatives.

And ah so we formed a group, and that was the turning point really because every community needs leadership. And that's the unfortunate thing, we're very fortunate to have a group in [Dorytown] that has very good leadership abilities, ah you had a lot of people there who were working elsewhere but maintaining their homes in [Dorytown]. Ah not every little community has a group that would come together and you know that has been involved.

...I knew people from Innovation Trade, Services Canada and ACOA. So you know once we got together as a group and did our visioning our brainstorming and our plan, we've taken a look at our inventory and this is what we feel we have in this community that's strengths that we can build upon...

Actually I remember the person from ACOA back in 1998, when we did the PowerPoint presentation of a concept paper that we developed in detail.... and at the end of it they were so impressed...we said you know we probably don't know where to go from here, we would probably need a consultant, and her response to the group was "What you have done is what we would have paid \$50,000 for a consultant to do" and something we had done ourselves right? And she said "You know probably not as good as this". So you know that was the response to our effort so that made us feel really good as a group.

Tourism Group representatives also talked about the human resources in terms of types of skills and volunteering contributed.

M: Yes that goes without saying, like we had the technology [computer, projector, software] you know here at the College of the North Atlantic. Brian was part of it he later became technician here. We had John, he was a fabulous resource...John came up with the subsistence theme... like you could see how people needed the fishery in the past, the game the wild birds, the berries, the woods everything, we're gonna kind of interpret all that in there. So John came up with that idea.

So that's how it all started so you know we had people there with expertise and people that had contacts, and you could bring people in and from there it could roll on. You know getting the community involved was really important so they feel part of it too, and you know it's been a fabulous response so far, with all the volunteering.

The following excerpt demonstrates that some of the Tourism Group leaders possessed marketing knowledge that was useful.

C: Of course when we started you know we had no money for publicity, you know we had 100\$ donation from our town they gave it to us to start but we had no money you know we had to go out and get all the free advertising we could and as public relations chair I took advantage of every opportunity that presented itself (the local papers and CBC radio provincial and national)... first we looked at the local papers, we did a news article probably 100 news articles in the regional paper in the last 8 years...really and Margaret's story The Root of An Idea that struck a lot of interest with the CBC picked up on the story and they instantly pretty well did an interview with me on it to see what was our plan with the Root cellars, and then CBC National Radio became interested in it and of course they

called in from Toronto and we did a live interview with them on the root cellars of [Dorytown] so instantly we took advantage.

Tourism leaders explained that they were aware that economic opportunities produced through tourism development would not replace employment lost from the fishery, but would begin to provide some jobs.

C:...we looked at it to promote tourism for economic development, trying to create the right economic environment for businesses to take charge and create employment of course we knew it would never replace the fishery but we formed Tourism Group committee in 1997 with a mandate of course to create economic opportunities for the people of [Dorytown] and surrounding area.

In the summer of 2005 (when the fieldwork for this project began), several projects from the Tourism Group were employing approximately 35 residents. For example, they had a tourism centre where six or seven guides could offer an interpretation and tour of root cellars in the town. Five people were hired to refurbish the old Orange Hall. It was going to be renovated as a heritage project and location that would eventually house a restaurant and perhaps local entertainment. Also, the tourism group had over a dozen residents working to restore historical J.R. merchant building. A Tourism Group representative explained the plan for that building. Ideas included an art gallery and museum, lecture theatre (connected to the puffin sanctuary), cafe style tea room, craft making workshops.

Other plans for the community included adding plumbing and septic infrastructure to accommodate campers at their beach park.

F: Yeah I hope you're able to get the infrastructure project in with the plumbing right.

M: We are hoping, 'cause that's needed right, that's the only thing that we desperately need (to attract tourists to the beach area, but also for use during the annual festival).

Also, the group plans to develop an interpretation centre at their "puffin site", this site is simply a grassy cliff that overlooks a small bird island, where puffins and other sea birds are quite visible from the shore.

S: So with the (historical merchant building) there'd be employment there for sure and then the Orange Hall but we're hoping for some sort of interpretation centre up at the puffin site. So we're hoping that would be a little business venture for us.

In terms of new tourism-related businesses, two families had opened bed and breakfasts (B&Bs) in the community. One of the B&B operators commented on the growing number of visitors:

T: Yeah, we noticed a difference this year. The first year we opened wasn't much to it but the summer past there was a little bit more. Hopefully it'll keep going like that.

(My husband)'s uncle in St. John's, he runs a bed and breakfast. He told us it would at least take five years (for our B&B to get established)...

In the summer of 2006, a local resident decided to offer hiking tours on a trail that joins Bigcove and its neighbouring town. The tour includes education on local sea birds.

7.1.2 Control of Project and Ownership of Resources

In Bigcove, the decision to re-open the fish processing plant had originated from outside the community (management of a fish processing company with several locations in the province). The ownership of resources (fish and shrimp) was located outside the community. Resources were controlled by the federal Department of Fisheries and Oceans.

In Dorytown, the tourism initiatives and resources used were controlled from within the community. The Bed and Breakfasts and guided seabird tours for example, were independent and controlled entirely by resident owners. Though the tourism projects that have employed many residents in the last three years were managed and owned by the community groups, these not-for-profit organizations were accountable to government funding partners and must comply with certain guidelines in order to receive funding (e.g., no retail operations receive government funding support). Accordingly, some aspects of these projects can be considered to be controlled from outside the community.

Table 7.1 details the resources contributed by federal Agency ACOA leading up to 2006. The projects listed reflected the project history as described by Tourism Group members. Employment figures per project were not available.

<u>Table 7.1 Projects led by the Atlantic Canada Opportunities Agency between 2001 and 2006</u>

		Total	Number
Year	Project	Amount	Employed
2001	Interpretation program and heritage planner	\$320,000	2
2002	Enhance Festival Site	\$226,699	5
2003	Restoration of Orange Hall	\$240,293	Not
			Available
2005	Restoration of the J.R. Heritage Building	\$227,358	15
Total		\$1,014,350	

Source: QAccess Administrative Data System, Atlantic Canada Opportunities Agency Note: Total amounts represent ACOA funding, along with funding from other project partners such as the provincial department Industry Trade and Rural Development and other federal departments

Table 7.2 describes projects supported by federal department HRDC leading up to 2006. Most of these projects were Job Creation Projects (JCPs), which require applicants to have worked enough weeks to qualify for Employment Insurance (EI). The nature of the

projects indicates that for the most part, these are smaller projects that were strategically developed to support the overall tourism strategy of the community.

<u>Table 7.2 Project investments from Human Resources Development Canada between 2000 and 2006</u>

		Number
Project	Amount	Employed
JCP - Root cellar restoration	\$73,806	5
JCP - Heritage Development	\$8,600 does	1
Coordinator	not include	
	wages	
JCP – Made targets at the shooting	\$4,350 does	5
range	not include	
	wages	
JCP - Transformed what was a storage	\$27,735	7
area into the Tourism Group office		
JCP - Researcher for Dorytown's	\$4,700	1
heritage and complied an information		
package for the tour guides		
JCP - Interpretative guides	\$29,581	6
JCP - Finish exterior restoration of	\$23,465	8
Orange Hall		
JCP - Construct two fish flakes and	\$93,738	12
permanent game and craft booths at		
Dorytown Municipal Park		
JCP - Interpretative Guides	\$47,000	8
JCP – Researchers completed an online	\$18,016	2
exhibit for the Community Memories		
JCP - Interior of Orange Hall	\$58,143	9
JCP - Complete exterior of J.R.	\$80,847	12
heritage building		
Youth Skills Link - Work experience	\$95,000	7
was tour guides		
	JCP - Root cellar restoration JCP - Heritage Development Coordinator JCP - Made targets at the shooting range JCP - Transformed what was a storage area into the Tourism Group office JCP - Researcher for Dorytown's heritage and complied an information package for the tour guides JCP - Interpretative guides JCP - Finish exterior restoration of Orange Hall JCP - Construct two fish flakes and permanent game and craft booths at Dorytown Municipal Park JCP - Interpretative Guides JCP - Researchers completed an online exhibit for the Community Memories JCP - Interior of Orange Hall JCP - Complete exterior of J.R. heritage building Youth Skills Link - Work experience	JCP - Root cellar restoration JCP - Heritage Development Coordinator S8,600 does not include wages JCP - Made targets at the shooting range JCP - Transformed what was a storage area into the Tourism Group office JCP - Researcher for Dorytown's heritage and complied an information package for the tour guides JCP - Interpretative guides JCP - Finish exterior restoration of Orange Hall JCP - Construct two fish flakes and permanent game and craft booths at Dorytown Municipal Park JCP - Interpretative Guides JCP - Researchers completed an online exhibit for the Community Memories JCP - Interior of Orange Hall JCP - Complete exterior of J.R. heritage building Youth Skills Link - Work experience \$95,000

Source: Tourism Group Records

Administrative and oversight functions for all projects described above were fulfilled by the Tourism Group resource person, who was able to secure full-time employment by combining funds raised during the annual festival with successful project applications which she and the Tourism Group leaders developed.

7.1.3 Sustainability of Employment

Bigcove

As stated in Chapter 6, many Bigcove residents reported difficulty in getting the work necessary to qualify for seasonal Employment Insurance benefits. In addition to this lack of security, the community felt threatened by a vulnerable fishing industry and reliance on a single company as a main employer. In 2006, the province-wide fish processing company was undergoing major changes and threats to sustainability, making for a more vulnerable and unstable employment situation.

When asked about the current status and future expectations for the fishery, Bigcove representatives indicated that the only news about the fishery was that there was going to be a decrease in weeks of harvesting crab due to declining stocks, affecting harvesters and plant workers in Bigcove and processors in Dorytown. One couple stated: "The uncertainty is the killer". During the fieldwork in the Fall of 2005, I attended fishery meetings in the nearby community that were hosted by regional political representatives. Members of the fishery union were present as well as provincial government representatives. Notably, no representatives from the federal Department of Fisheries and Oceans were present. One of the few fish harvesters in Bigcove was an active member of the union and known as a leader in the area. He stated that there was very little activity and direction coming from governments with regards to the future of the fishery.

There was general scepticism of on-going restructuring of the fishery and government attempts to address growing uncertainty across the province. Though government representatives stated that they would be moving forward in a positive direction in 2006 meetings on the status of the fishery, leaders from fishery-dependent Bigcove pointed to the lack of involvement and control from the fishermen, one stated that he felt the meetings were "...only for show".

Dorytown

Several Dorytown project employees talked about their experiences coming to work on the projects. The discussion turned to the role that the projects previously had in securing Employment Insurance (EI) income during the winter months. Three female project workers interviewed explained that during previous summers, the federal government had put in place project money delivered through ACOA. For those employed on the ACOA projects, hours worked were considered for EI eligibility. When interviewed in the Spring of 2006, no such project funding was available, and groups and towns had to apply for project funding through HRDC's Job Creation Program (JCP), with no ability to dedicate the hours towards an EI qualification.

Ma: This is the only year now they don't have projects for fishery workers. Danny Williams (premier of Newfoundland and Labrador) said he was gonna look after displaced fish plant workers. But I don't know who he meant by fish plant workers, 'cause we certainly weren't looked after, I didn't get any hours at all this year. I didn't get any. Last year I got 54 and then went on the hours to do up the lodge here in [Dorytown], and that's how I got my hours last year.

... we're coming off of this project the 14th of January, we got nothing.

M: Mmm. So do you guys [others] have your hours, not this year?

All: No, we don 't have the hours. Nothing.

Project employees all worried about their economic future:

M: Am so after the end of a project, it's the end so is there always that feeling, like after a project like what am I gonna do after? Or...

All: Oh gosh yes.

Ma: Yes and like before at least we had hours to qualify for EI but now we don't even have hours so like, what are we gonna do?

G: I mean after that, is there gonna be anything for us before this finishes? Right?

While some residents were concerned over their future employment, leaders were optimistic about the future:

G: It's tourism that's gonna keep 'er goin'. You know the tourists and stuff. And also the retired people who come up and the scattered (one) buying up property and living in the summer. You'll get people coming back home, people gone from this town for years and still own land there, they'll be coming back and building up too there. That's one good thing you know.

Another community leader stated:

The fishery won't come back to what it was but maybe people here will fish in (neighbouring larger town).

People are buying up homes in the community now. People from outside. Summer homes is great, it's much better to see life and beautiful gardens in the summer time than an abandoned house. And they participate in the community, pay their taxes. They come up with ideas that are good for the town. Sometimes they have difficulty adjusting but that works both ways.

Since 2006, tourism was steadily increasing and the growth was expected to continue. Local tourism continued to receive increased exposure through newspapers, magazines and other forms of media (e.g., an appearance on the television program 'Land and Sea' which has aired three times in 2005 and 2006).

At the end of the fieldwork in 2006, the town needed to grow its tourism operations in order to accommodate the tourism traffic. Recent projects provided the historical buildings and spaces that are needed to develop tourism. Community residents needed to occupy the space with businesses that would engage visitors. At the time of this analysis, it was yet unknown whether and how residents would rise to this occasion, whether people from outside communities will take advantage of these entrepreneurial opportunities, or whether the buildings will remain unoccupied. A Tourism Group representative explained:

M: Again I think the challenge is again, stimulating that local opportunity, local employment, not project based, but something that's full time seasonal or whatever and getting people to take advantage of what's happening there, that's going to be our biggest challenge now. And I think how we approach to do that is going to be very very important....

F: You would hope that some of the community residents that haven't maybe been entrepreneurs in the past would see opportunities and take advantage of them.

M: That's a big challenge here in rural NL. Like we haven't been entrepreneurs, we're not risk takers, we're used to being employed by others in a safe environment and not many people would take a risk.

In spite of the fact that most of the job creation came from government funding up to that point, Tourism Group representatives remained optimistic about creating non-subsidized employment.

M: And see it takes a long time too when you're looking at employment, and I know it's been eight years but I think you're gonna start seeing that benefit soon. Well we've got the two B&Bs there that are established, now we've got the Orange Hall that's gonna be developed for employment. Then the (historical merchant) premises, we have a beautiful plan there that we hope will take place.

Members of the Tourism Group had some ideas for tourism businesses to occupy the spaces created. The Tourism Group itself had also expressed interest in the occupation of the structures, but is not-for-profit and constrained by government funding guidelines.

7.2 Employment and Income Data

Government statistics relating to employment (net jobs, part-time vs. full-time, duration, occupation by industry) were obtained to gain a sense of the nature of the economic context and any LED that took place in either community.

7.2.1 Job Creation

Figure 7.1 illustrates the number of residents reporting employment income using taxation data from 1990 to 2006, allowing for an observation of possible trends.

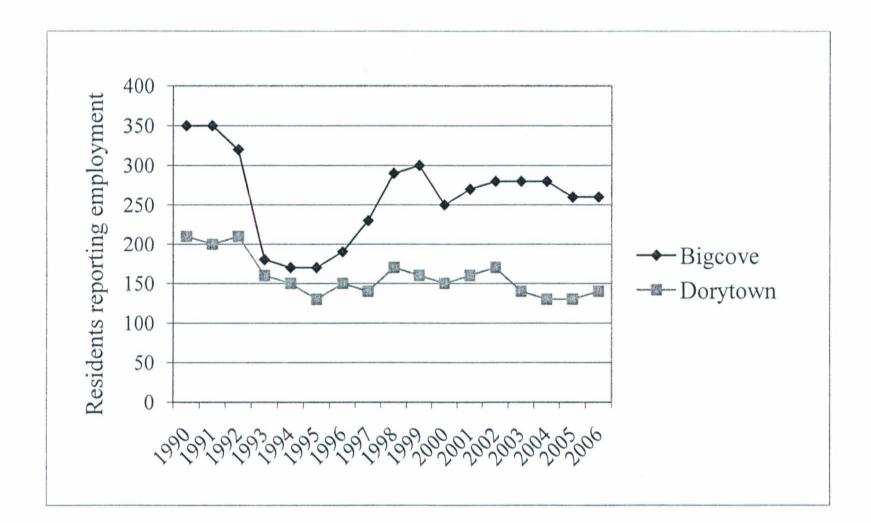


Figure 7.1 Number of residents in Bigcove and Dorytown reporting employment income from 1990 to 2003

Source: Compiled in Community Accounts Unit, based on Canada Customs and Revenue Agency summary information as provided by Small Area and Administrative Data Division, Statistics Canada

Figure 7.1 illustrates changes in employment since the early 1990s. The lower number of employed residents in Dorytown coincided with its lower population. There have been increases in employment for both communities since 2000, with a decline in 2003 and

2004 for Dorytown. Employment figures seemed to be stabilizing in 2005 and increasing in 2006 for Dorytown while in Bigcove, there seemed to be a sharp decrease of net jobs in 2005 followed by a stabilisation in 2006.

As presented in Figure 6.3, an examination of the proportion of labour force aged population reporting employment income (i.e., employed at some point during the year) does not reflect substantial differences between the two communities since 2000.

Though Bigcove lost more jobs since 2005 (see Figure 7.1), its percentage of labour force reporting employment income remained relatively high, fluctuating between 92% and 96% from 2002 to 2006, possibly due to outmigration of labour-force aged population that was unable to find work. From 2003 to 2005 in Dorytown, the proportion of labour force reporting employment income remained stable at approximately 85% with an increase to 93% in 2006.

As previously seen in Figure 6.4, there was a greater discrepancy between the communities in the proportion of labour force aged residents that were employed over the entire year. For Bigcove, year-round employment as a proportion of the labour force aged population declined by 5% (79% to 74%), while Dorytown sustained a 12% decline (from 74% to 62%). However, these statistics were not available for 2006. Figure 7.2 suggests that there could have been an increase in employment for Dorytown residents that year.

7.2.2 Type of Work

According to Census data (see Figure 7.2), in both communities, there appeared to be more cases of employment that were part-time or part of the year than full-time and the

entire year, reflecting the seasonal nature of the economies in the two towns. Since 1996, Dorytown has sustained a net decrease in both types of employment, while Bigcove sustained a net decrease in full-time/full year employment, but a substantial increase in part-time, part year employment.

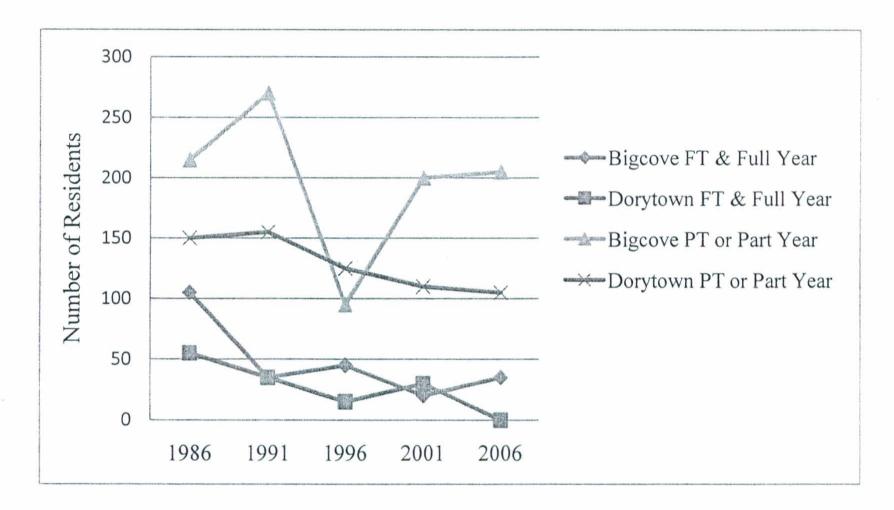


Figure 7.2 Part-time and full-time employment in Bigcove and Dorytown as reported by residents in the 1985, 1990, 1996, 2001 and 2006 Census.

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

Figure 7.3 illustrates employment duration for Bigcove for the years 1985, 1990, 1996, 2001 and 2006. In general, employment categories between 12 and 49 weeks reached their lowest point in 1996, while year-round employment reached its lowest point in 2001. In 2006, there was an increase in residents reporting under 12 weeks of employment, and over 50 weeks of employment, while employment categories lasting between 12 and 49 weeks sustained decreases. Census data for weeks worked by occupation revealed that two thirds of the employment lasting 50 weeks or more was

sales and service occupations, while the other third was office and related occupations. According to the gender breakdown of occupations reported in the Census, both types of occupations were held by women in the community. Types of employment lasting less than 50 weeks was in fishery and other primary sector jobs (occupied by men), construction and related jobs (both genders), and processing and manufacturing occupations (both genders).

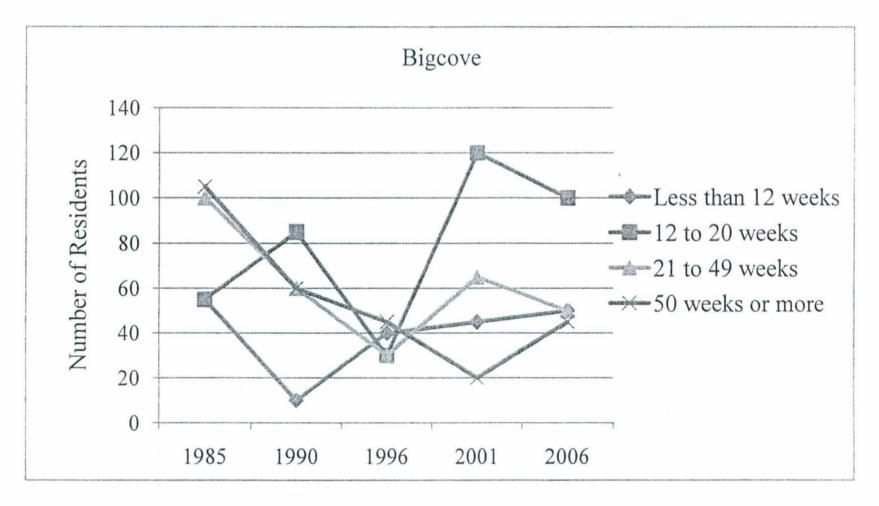


Figure 7.3 Employment duration in Bigcove in 1985, 1990, 1996, 2001 and 2006

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

Figure 7.4 demonstrates the duration of employment in weeks for Dorytown from 1985 to 2006. Generally speaking, the two employment categories of greatest duration appear to have declined sharply from 1985 to 1996, increased in 2001 and declined again in 2006. In 2006, there was an increase in residents reporting employment lasting 12 to 20 weeks, reflecting a growth in seasonal employment to levels higher than reported in 1996. Almost two thirds of these jobs were in sales and service occupations (both genders). Of

the other third, half were processing and manufacturing jobs (both genders) while the other half were construction and related occupations (predominantly male).

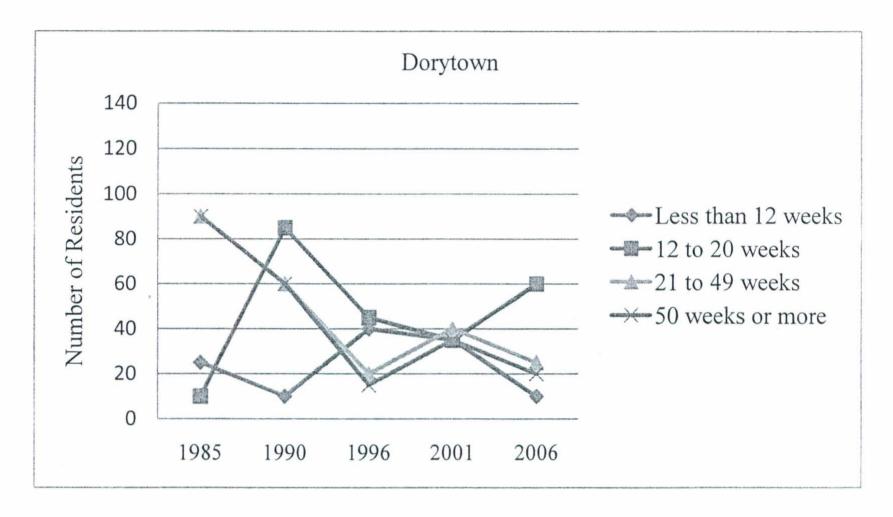


Figure 7.4 Employment duration in Dorytown for 1985, 1990, 1996, 2001 and 2006

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

There was a decrease in all other employment duration categories between 2001 and 2006. Other seasonal employment was split between the sales and service jobs and construction and related employment. Half of the employment lasting 50 weeks or more was in the health field and the other half was office support and related employment, with both fields occupied by women.

7.2.3 Location of Work

The Newfoundland and Labrador government has produced regional maps that depict the number of resident that travel outside the community to other towns for work, and the amount that work within the community. To preserve the anonymity of the communities,

the regional map that includes Bigcove and Dorytown cannot be included in this document. However, it is worth noting that for both communities, the vast majority of residents travel to neighbouring communities for work.

7.2.4 Income Changes

Figure 7.5 illustrates that between 1990 and 2006, median family income increased for Bigcove, in Dorytown and for the Province in general, though the provincial median family income has been considerably greater than for the two communities studied. Bigcove family income sustained an increase followed by decreasea between 2003 and 2005. In 2005 and 2006, median family income was similar for the two towns.

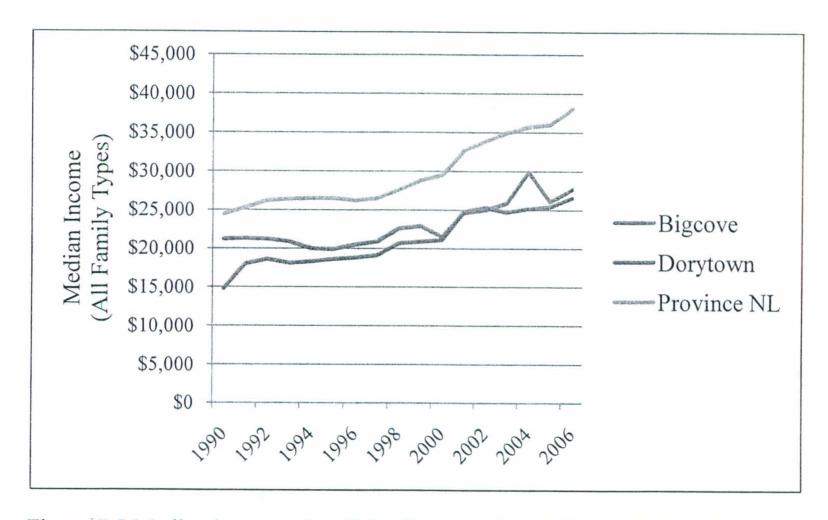


Figure 7.5 Median incomes for all family types from 1990 to 2006 for Bigcove, Dorytown and the province of Newfoundland and Labrador

Source: Compiled in Community Accounts Unit, based on Canada Customs and Revenue Agency summary information as provided by Small Area and Administrative Data Division, Statistics Canada

7.2.5 Economic Diversification

Standardized Shannon entropy is a diversity index that is a measure of regional economic diversity. It is a continuous value that ranges from 0 to 1. A region that is high in Shannon entropy is representative of a diverse economy where people work in many different industries. Measures of Standardized Shannon Entropy were obtained from the Community Accounts website of the Department of Finance and Statistics, Government of Newfoundland and Labrador. Contrarily a region that has low Shannon entropy has a work force limited to a small number of industries.

In 2006, Shannon entropy in Bigcove was 0.60 and Shannon entropy in Dorytown was 0.69. This index would indicate that Dorytown was slightly more economically diverse.

Occupation type was examined as an indicator of employment diversity. Figure 7.6 details the proportion of jobs by type for Bigcove in 1996, 2001 and 2006. The distribution of occupations in 1996 reflects the decline of fish-processing work caused by the moratorium. There were 100 fewer jobs reported in 1996 than in 2001. Charts for

¹⁵ Standardized Shannon Entropy was calculated by Community Accounts in two steps. The first step was to calculate Shannon Entropy:

Shannon Entropy = $-1 * \sum (percent * ln(percent))$

The percent is the proportion of the jobs in a given industry to the total employed population (for all industries).

Then the natural log of this percent was multiplied by the percentage of jobs for that given industry. This value was then summed with the similar values for the other industry categories and multiplied by -1 to obtain the Shannon Entropy value.

The second step was to standardize the value by using the formula below:

Standardized Shannon Entropy = Shannon Entropy / Maximum Entropy, where Maximum Entropy = ln(N), where N is the number of industries.

Employment was calculated using twenty industries defined by Statistics Canada as two-digit North American Industry Classification System codes: agriculture, forestry, fishing and hunting; real estate, rental and leasing; mining and oil and gas extraction; professional, scientific and technical services; utilities; management of companies and enterprises; construction, administrative and support; waste management and remediation services; manufacturing; educational services; wholesale trade; health care and social assistance; retail trade; arts, entertainment and recreation; transportation and warehousing; accommodation and food services; information and cultural industries; other services (except public administration); finance and insurance; and public administration.

2001 and 2006 reflect the revival of fish processing work and other manufacturing. Other large categories of occupations include sales and service jobs, as well as employment in the primary sector (e.g. fish harvesting).

Figure 7.7 illustrates the distribution of occupation types for Dorytown for the same period. Two important occupation categories for Dorytown throughout the period are sales and service occupations as well as construction, trades and labour jobs. Fish processing work appears to be relatively non-existent for Dorytown in 2006.

An examination of occupation types in 2006 presented in Figures 7.6 and 7.7 reveals key differences between the communities. In Bigcove, a large proportion of occupations were related to other manufacturing (28%), fish processing (23%), followed by sales and service occupations (15%) and primary sector occupations (13%). In Dorytown, a large proportion of employment was related to sales and services (45%), followed by office and related employment (13%) and construction and related employment (13%). One key distinction between the communities was the greater proportion of jobs related to the fishery in Bigcove compared to Dorytown.

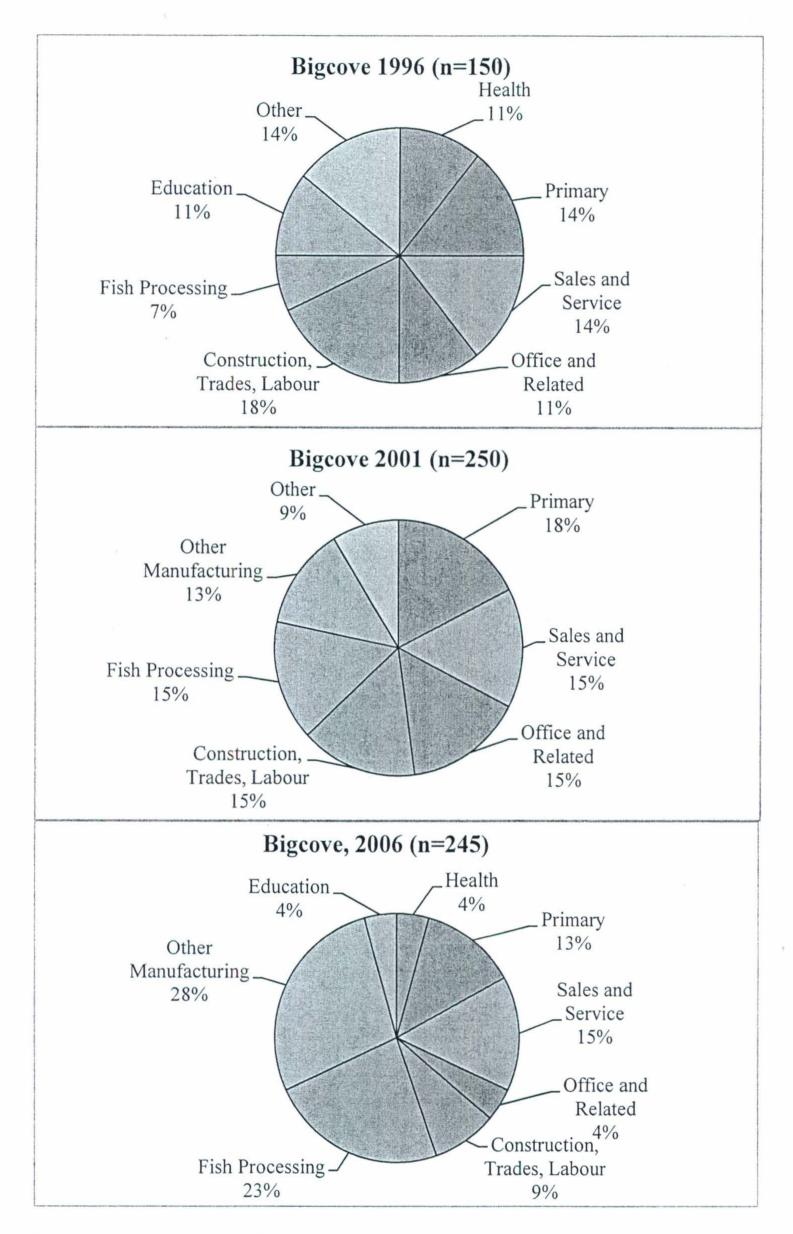


Figure 7.6 Occupation by industry for Bigcove in 1996, 2001 and 2006

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

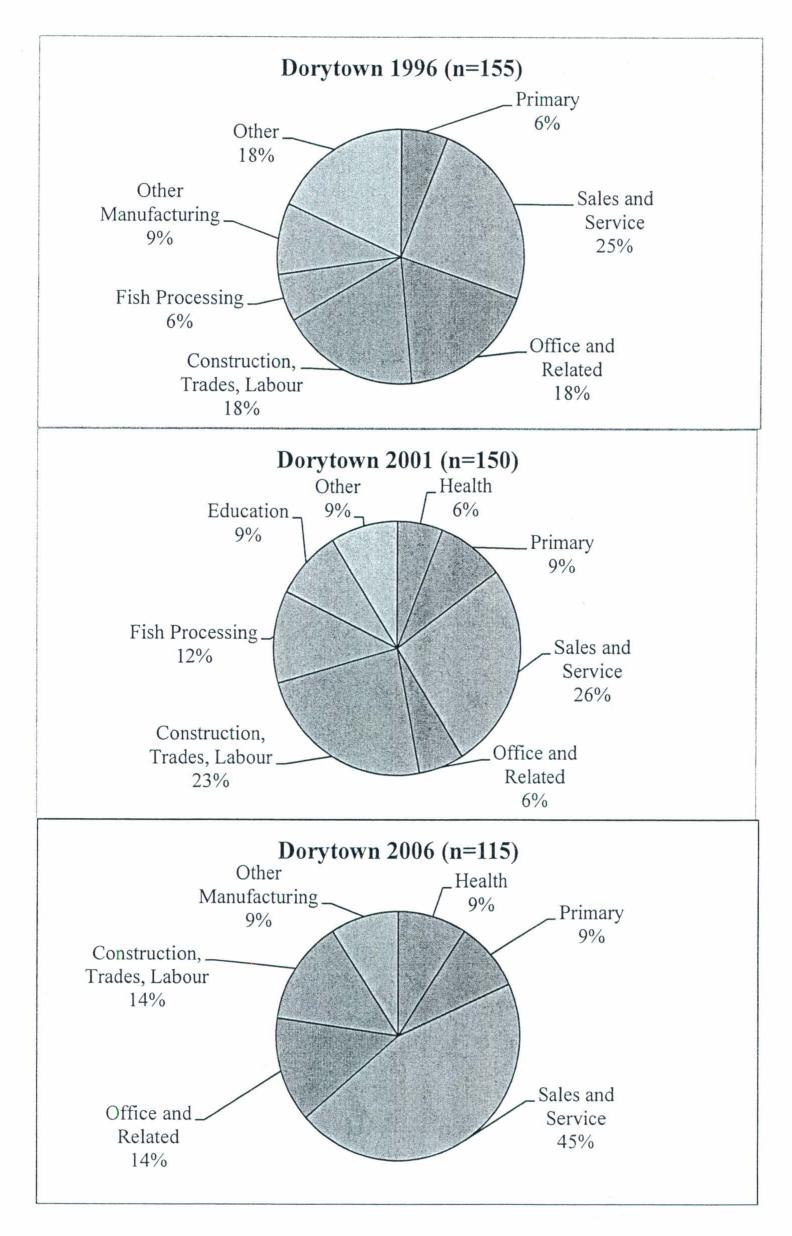


Figure 7.7 Occupation by industry for Dorytown in 1996, 2001 and 2006

Source: Statistics Canada Census Data, in Community Accounts. Newfoundland and Labrador Statistics Agency. Government of Newfoundland and Labrador

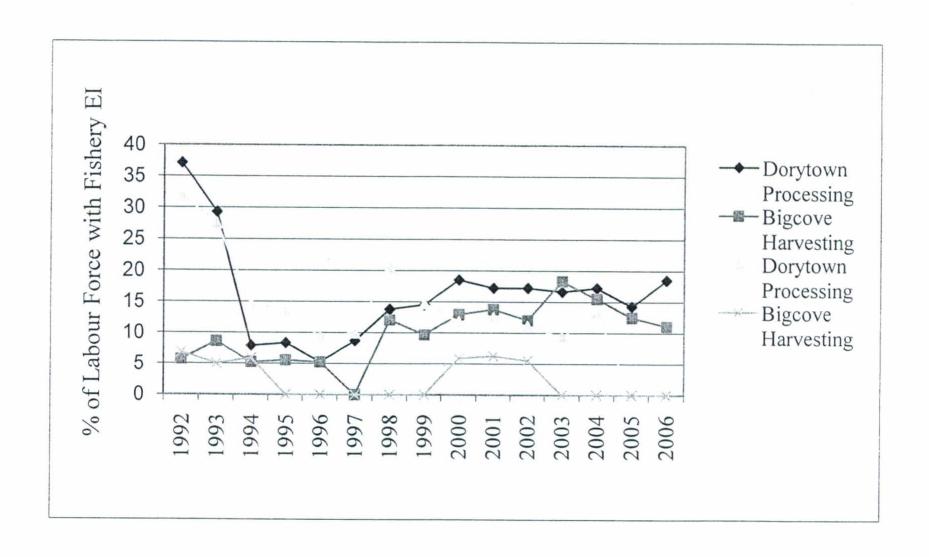


Figure 7.8 Fish harvesting and processing related EI Claims for Bigcove and Dorytown from 1993 to 2006

Source: Compiled in Community Accounts Unit, based on Canada Customs and Revenue Agency summary information as provided by Small Area and Administrative Data Division, Statistics Canada

In order to ascertain fishery dependency or the extent of fishery-related employment in both communities, data on employment insurance claims for this industry were also obtained through Community Accounts, of the Newfoundland and Labrador Statistics Agency (see Figure 7.8).

As previously suggested by occupation type data, an examination of fishery related Employment Insurance (EI) claims also reveals that between 2001 and 2006, Bigcove is more dependent on this seasonal industry than Dorytown, having sustained increases in the proportion of fish processing EI claims in 2006. In contrast, for 2005 and 2006, available data are showing no EI claims in Dorytown in fishery occupations. If fish-

processing or harvesting employment is taking place in Dorytown, it is likely not meeting duration requirements for EI.

7.3 LED Discussion

LED findings were presented in this chapter with the objective of describing the nature and extent of economic development that had taken place in the two communities.

7.3.1 Profile of LED

According to data obtained through interviews and ethnographic fieldwork, Bigcove can be more accurately described as having felt the effects of a small resurgence in industrial development in the late 1990s controlled by stakeholders outside the community, while Dorytown experienced diversification of its economy through tourism-related economic activity, with project management heavily controlled at the community-level and control of resources (money for projects) located outside the community. Interviews with residents and leaders suggested that a substantial amount of volunteer and other effort was invested into planning and executing the Dorytown development. As such, Dorytown was found to exercise more control over its development than Bigcove. According to Swack and Mason (1994), community control can reduce its vulnerability to potential detrimental external interests.

Resources utilized by Dorytown for the tourism development included human resources in the form of skills and relationships or connections to people within the community who could volunteer and outside the community who could provide financial resources to the project. Natural resources such as the sandy beach and puffin sanctuary were also drawn upon during the development, along with built resources such as the root cellars,

which were a central element in the subsistence/heritage development theme. A majority of the financial resources contributed to the development came from government departments such as ACOA and Service Canada.

These results are to be interpreted bearing in mind that the successes of Dorytown primarily hinged upon the availability of federal programming with the aims of gaining labour skills (HRDC) and stimulating local economies to create employment opportunities (ACOA). In effect, government ideologies and political economies have considerable influence over the distribution of wealth and opportunity in societies, thereby influencing population health (Coburn, 2006; Raphael, 2006). These "vertical" or "macro-strucutral" factors are rarely studied in the context of the social determinants of health, but are thought to at least partly account for national differences in population health (Raphael, 2006).

Qualitative data on the process by which LED took place in Dorytown suggests that it somewhat resembles CED as defined by the Canadian CED Network (2010). That is, rooted in local knowledge and led by community members, and promoting holistic approaches which address individual, community and regional goals. The approach encouraged involvement of community members and the initiative was positioned within the regional economic dynamic.

Tourism initiatives in Dorytown appeared to have inspired some entrepreneurship and some employment. Most of the jobs created have been finite term employment contracts for heritage building repair and tour guide operations funded through government projects. In a small community, these jobs certainly make a world of difference and

residents will take what they can get. Nevertheless, as residents pointed out, the lack of security associated with year to year government-sponsored projects carried with it considerable insecurity about the future. As Blakely and Bradshaw (2002) pointed out, increases in tourism and retirement in rural communities were not likely to replace the jobs lost in the basic sectors of the rural economy. The Coasts Under Stress project (Ommer, 2007) examined the impact of tourism initiatives since the cod moratorium and concluded that employment generated was typically seasonal, less secure and poorly paid. Concerns about the insecurity of government project work were raised by residents working on the Tourism Group projects.

Government statistics suggested that though there appeared to be more jobs in Bigcove (larger population), reports of employment income as a proportion of the labour force did not differ substantially between the two communities. Since 1996, both towns sustained net decreases in proportion of the labour force reporting full-time/full-year employment, and Bigcove sustained an increase in part-time/part-year employment while Dorytown sustained a net decrease for this type of employment. This presents a more positive employment situation for Bigcove in 2006.

Between 2001 and 2006, Bigcove sustained an increase in part-time employment, in full-time year-round employment and employment lasting 12 weeks or less, while Dorytown sustained decreases in part-time and full-time employment, but a substantial increase in employment lasting between 12 and 20 weeks (seasonal work). A gender analysis of these jobs suggested that in Bigcove, women were occupying the full-time, year-round jobs. Though residents did not discuss this phenomenon during the fieldwork, other scholars have reported that in rural/coastal settings in the province where incomes from

the fishery have declined for many, women often found themselves working longer hours for a longer period, in addition to the household duties for which they are typically responsible (MacDonald, Neis & Murray, 2008). In Dorytown, most occupational categories were held by both genders, with the exception of jobs in the construction industry (approximately 20% of the seasonal work). In summary, Bigcove appeared to have benefited from more full time and full year employment than Dorytown, but to have remained more dependent on the volatile fishery than Dorytown.

Standardized Shannon Entropy calculated for both towns suggested that Dorytown appeared to have a more diverse economy (employment in a greater variety of industries) than Bigcove. As suggested by Dissart (2003), the greater economic diversity of a community can reduce its vulnerability to unemployment cycles and increase its long-term stability. However, the two-digit NAICS codes used to calculate Standardized Shannon Entropy combine fishing, agriculture, and forestry in the same industrial category. This could have the effect of masking actual diversification between those industries or diversification around the staple base within those industries. Though a high proportion of employment in Dorytown was in sales and service related occupations, these types of occupations can be present in a wide range of industries. It would have been useful to have more information on those occupations. In terms of describing the economies of both communities along a continuum of divergence vs. convergence (Loxley & Lamb, 2006), the heavier reliance on the fishery in Bigcove makes it a more divergent economy, closer to a "staple" type of economy, than Dorytown.

With respect to security or sustainability of employment in both communities, residents in both towns were concerned about continuous availability of employment and

qualifying for EI. Concerns in Bigcove certainly centred on the viability of the fishery and related processing work, while concerns in Dorytown were related to both the fishery and tourism-related jobs. In both communities, it can be concluded that the jobs created have enabled more people to remain in their home towns.

It is very difficult to claim that one community has been more successful in LED than the other. In 2006, Dorytown appeared to be a little more diversified than Bigcove. However, employment statistics slightly favoured Bigcove. Employment and income indicators were similar for the two towns.

The finding that most residents of both towns travel outside their communities for work suggests that LED must be considered within the regional economic dynamic. This supports the contention of Loxley and Lamb (2007), that the economics of LED can rarely be contained within a community. As demonstrated in Bigcove, the benefits of economic development can extend to neighbouring towns as well (fish processing work).

Power in LED

As mentioned in Chapter 1, power relations have historically played an important role in economic development, or lack thereof. Within the two communities studied, members of the tourism group and community leaders exercised their decision-making powers when choosing employees for the projects, etc. Inevitably, these decisions occur to the detriment of some and for the benefit of others. Provincial and federal government funding representatives, their managers and the political leaders of the day each play a part in deciding whether to accept or decline applications for funding from communities. These actors also play an important part in setting the regulations that allow or prevent

certain types of development to take place within the fishery (e.g. Department of Fisheries and Oceans). Lending institutions such as banks are also gatekeepers in that the decision-making structures are often centralized to larger cities and not conducive to supporting business loans to rural areas.

Leaving as a viable alternative

During the fieldwork, some younger families stated that if their employment was terminated, they would have to contemplate moving away for work. However, many older working residents stated in conversation that leaving would not be a feasible option as they would not obtain good value for their homes if they tried to sell, and the cost of leaving would outweigh the benefits of finding work to sustain them for only a few years until they retire. As stated by House, White and Ripley (1989) in their study "Going Away and Coming Back", decisions to leave and return have to be considered in the context of the local economy and how it works, and in terms of people's every day behaviours, aspirations, satisfactions and disappointments.

For these residents, the available jobs, however insecure in nature, are likely to reduce their dependency on income support programs such as Social Assistance if they stay. The impact of the seasonal work on EI rates will depend on the duration of employment but also whether the hours can be dedicated to EI applications, as was not the case for JCP projects. Residents of these communities were accustomed to a seasonal work environment where Employment Insurance is an accepted and normal part of the seasonal economy. It was clear in conversations with them that the ability to qualify for receipt of seasonal Employment Insurance is viewed as an indicator of job success and a desirable outcome.

7.3.2 Utility of Methods Used to Study LED

Information obtained through qualitative methods was critical for providing some indication of economic resilience processes or how and by whom action was taken to create economic opportunities. Conversations about LED with almost all interviewees helped to provide a more complete picture of this. Government employment and income statistics were most useful for describing the extent and type of economic activity that has taken place in the communities.

Overview of Chapter 7

- Though Bigcove was selected as high in LED based-on its higher employment elasticity (1991-2001), it was found that the employment elasticity was caused by a closure and re-opening of the nearby fish processing plant, a decision controlled from outside the community. The call back to work was based on seniority with the company, which happened to favour residents of Bigcove compared to surrounding areas, approximately 40 residents were employed there in 2005.

 Though some residents left the community, more were enabled to stay for the seasonal work opportunity than in Dorytown.
- Though it was low in employment elasticity (1992-2001), Dorytown was actively developing a tourism strategy to diversify from the fishery, resulting in recent employment for many residents (35 in 2005), and the opening of two Bed and Breakfast operations and a hiking tour guide business. The strategy has been managed at the community level, but largely dependent on government funding awarded through proposals until 2006. Tourism-related economic activity has continued to increase since 2006.

- Though there are appeared to be more jobs in Bigcove (larger population),
 employment rates as a proportion of the labour force did not differ substantially
 between the two communities.
- The economy of Dorytown appeared to be more diversified than that of Bigcove, which was more dependent on the volatile fishery. The sustainable creation of tourism employment remains to be seen. This will require continued entrepreneurship on the part of residents (ex: Bed and Breakfast operators, hiking tour operators, restaurants) and the development of more new businesses.

Chapter 8: Social Capital Findings

Social capital, or the features of social life – networks, norms and trust – that enable participants to act together more effectively to pursue shared objectives (Putnam, 1995), was studied through a questionnaire survey, associational indicators, and qualitative methods such as ethnography (participation/observation) and interviews (see Chapter 3). Findings are presented below by method.

8.1 Social Capital: Questionnaire Findings

The survey questionnaire included items suggested to measure psychological predictors of social capital (Long & Perkins, 2007; Perkins & Long, 2002), as well as social capital cognitions and behaviours (Perkins & Long, 2003; Pooley, Cohen & Pike, 2005; Obst & White, 2004). Two-tailed independent t-test statistics were calculated to test for differences between the mean scores of the two communities (t scores and p values are shown). Where sample distributions did not meet the criteria for normality (skewness and kurtosis between +2 and -2), a Mann-Whitney Rank Sum-U was calculated (z scores and p values are shown).

8.1.1 Questionnaire Psychological Predictors of Social Capital

Mean scores and statistics for the psychological predictors of social capital are outlined in Table 8.1. Both communities scored high in place attachment and communitarianism (worth given to one's community as well as a commitment to collective community improvement). Though scores for the two concepts were slightly higher in Dorytown, the difference was not statistically significant.

Table 8.1 Psychological predictors of social capital for Bigcove and Dorytown

Psychological Predictors of	Comn	Statistic		
Social Capital	Bigcove (x)	Dorytown(x)	t	p
Rating Scale 1 to 3	1.69	2.21***	5.25	0.00
Community Confidence				
Rating Scale 1 to 7			<u>Z</u>	р
Place Attachment	6.22	6.44	-0.02	0.94
Communitarianism	6.27	6.43	0.68	0.42

^{***} p. <.001

Note: Scale for community confidence: "get worse", "stay the same", "get better" Scales for place attachment and communitarianism: 1= Strongly disagree to 7=Strongly agree

When asked about community confidence, or whether the situation in their communities would "get worse", "stay the same" or "get better", the average response in Bigcove was between "stay the same" and "get worse" at 1.69, while Dorytown's average response was between "stay the same" and "get better" at 2.21. The difference between the communities was statistically significant (t=5.25, p<.001).

8.1.2 Questionnaire Indicators of Social Capital

As described in Chapter 3, a variety of measures have been suggested as indicators of social capital. Some measures such as community efficacy and neighbouring behaviours have had little use to date, while others such as SOC have been studied extensively but consensus has not yet been reached on its subscales and their measurement (see Chapters 2 and 3). For these reasons, a factor analysis was conducted for all 25 items drawn from the Obst and White (2004) SOC sub-scales, Perkins and Long (2002) measurement of collective efficacy and neighbour trust, participation/volunteerism and neighbouring behaviours, and a question about the hours volunteered per month.

A Principal Components Analysis (PCA) was performed. Appendix 8-A presents eigen values and variance accounted for by the factors. Table 8.2 presents the results of the orthogonal (Varimax) rotation. As can be seen from the table, clear and distinct factor themes emerged. Eight factors accounted for a cumulative 68.72% of the variance.

Factor 1 accounted for 16.80% of the variance, and included five collective efficacy items such as "My community can accomplish improvement of physical conditions" and "My community can be successful in the projects they undertake".

Factor 2 accounted for 13.7% of the variance, and included four civic participation items such as "In the last year, have you been a member of a community group or committee and participated in meetings?" and "In the last year, have you been a member of a community group or committee and participated in activities outside meetings?"

Factor 3 included three SOC membership measures such as "I think my community is a good place for me to live "and "I feel at home in this community", which accounted for 10.16% of the variance.

Factor 4, four SOC neighbouring behaviour items such as "How many neighbours asked for advice on a personal problem?" and "How many neighbours asked for help in an emergency?" accounted for 8.79% of the variance.

The following four factors (Factors 5 through 8) each accounted for approximately 5% of the variance for a total of 19.86% of additional variance explained.

Factor 5 reflected emotional connection between neighbours such as "If there is a problem in this community, people who live here can get it solved", "The people who

live in this neighbourhood get along well" and "How many neighbours asked you to look after their house while they were away".

Factor 6 represents three SOC neighbour trust items such as "I have no influence over what this community is like" and "People in this community do not share the same values" (these item scores were inversed prior to the PCA), while Factor 7 refers to three SOC mutual influence items such as "My neighbours and I want the same things from my community" and "I care about what my neighbours think about my actions".

Finally, Factor 8 corresponds to participation in activities organized by community groups. As can be seen, some of the subscale items for SOC were reflected in the factor analysis rather than all SOC items together, which could be expected given the multidimensional nature of the concept.

Table 8.2 Rotated factor loadings for suggested indicators of social capital

Social Capital Items				F	actors			
	1	2	3	4	5	6	7	8
My community can accomplish improvement	.796							
of physical conditions	.,,,							
My community can persuade the government	.734							
for better services								
My community can reduce crime	.727							
My community can inform residents where to	.722							
go for services								
My community can be successful in the projects they undertake	.672							
In the last year, have you been a member of a								
community group or committee and		.873						
participated in meetings?		.0/3						
In the last year, have you been a member of a								
community group or committee and		.857						
participated in activities outside meetings?		.037						
How many hours per month do you volunteer?		.723						
In the last year, have you volunteered to work		.123						
for a group or activity in your community?		.721						
think my community is a good place for me to								
ive			.914					
feel at home in this community			.880					
t is very important to me to live in this								
particular community			.842					
How many neighbours asked for advice on a								
personal problem?				.775				
How many neighbours asked to help during an				7.12				
emergency?				.743				
How many neighbours wanted to discuss a				742				
community problem?				.742				
How many neighbours asked to lend them				170				
something?				.478				
f there is a problem in this community, people					.672			
who live here can get it solved					.072			
The people who live in this neighborhood get					.652			
along well					.032			
How many neighbours asked you to watch their					578			
nome while they were away?					.570			
People in this community do not share the same						.736		
values						.,,,,		
have almost no influence over what this						.705		
community is like								
Very few of my neighbours know me						.525		
care about what my neighbours think about							.704	
ny actions								
My neighbours and I want the same thing from							.527	
his community								
n the last year, have you participated in								704
ctivities organized by groups in your community?								.704

Table 8.3 presents mean scores and frequencies of social capital indicators for both communities as determined by the factor analysis. As suggested by the factor analysis, a volunteering variable was created by adding three yes/no volunteering items for a maximum score of three yes responses.

<u>Table 8.3 Questionnaire indicators of social capital for Bigcove and Dorytown as suggested by the factor analysis</u>

Questionnaire Indicators of	Comm			
Social Capital	Bigcove	Dorytown	- Statistic	
Rating Scale 1 to 7	<u>X</u>	<u>X</u>	<u>t</u>	р
Collective Efficacy	4.50	5.17***	3.40	0.00
SOC Membership or Belonging	6.21	6.41	1.03	0.31
SOC Emotional Connection	5.20	5.80***	2.99	0.00
SOC Neighbour Trust	5.83	5.90	0.92	0.36
SOC Mutual Influence	5.34	5.25	0.58	0.63
Rating Scale 1 to 3				
Neighbouring Behaviours	1.85	1.91	0.78	0.44
***			<u>Z</u>	р
Hours Volunteering per Month	5.06	5.90	0.73	0.34
	\sum	\sum_{i}		
Total Hours Volunteered per	354	413		
Community				
Score 1 to 3	<u>X</u>	<u>X</u>	t	<u>р</u>
Volunteer for committees and	1.60	1.39	- .94	0.35
activities in the last year	1.00	1.59	.,,,	0.55
activities in the fast year				
Participation in community			***************************************	
activities in the last year	n (%)	<u>n (%)</u>	$\underline{X^2}$	p
Yes	47 (67.1)	52 (75.4)	1.15	0.29
No	22 (32.9)	17 (24.6)		

^{***} p.<0.001

Residents of both communities responded positively to the questionnaire indicators of social capital. Dorytown average scores tended to be higher. Two of the five proposed indicators revealed statistically significant differences between the two communities studied. Respondents from Dorytown reported a stronger belief in the effectiveness of organized community action, or collective efficacy (t=3.40, p<.001), while the average

response for Bigcove was close to neutral. Residents of Dorytown also reported greater ability to solve problems together and to get along with each other (t=2.99, p<0.001), which has also been called emotional connection by SOC scholars. Interestingly, both factors include a problem solving characteristic. Though no statistically significant difference between communities was found in the average number of hours volunteered per month, it was interesting to note that the sum of hours volunteered on a monthly basis per community was 354 hours for Bigcove and 413 hours for Dorytown.

Considering the survey sample for Bigcove is suspected to under-represent residents aged 65 and over, correlations were computed between age and the questionnaire indicators of social capital as suggested in the above factor analysis to be relevant. Table 8.4 outlines the correlations between age and the other variables. Age was weakly correlated with emotional connection (r=.269, p<.01) and collective efficacy (r=.184, p<.05). This would suggest that the under-representation of seniors in Bigcove had relatively little influence over observed differences between the communities.

<u>Table 8.4 Correlations between age and social capital predictors and indicators</u>
** Correlation is significant at the 0.01 level (2-tailed).

	1	2	3	4	5	6	7	8	9
1. Age									
2-Collective Efficacy	.184*	1							
3-Volunteer for committees or	.076	085	1						
activities 4-SOC									
Membership or Belonging	.110	.191*	.049	1					
5-Neighbouring Behaviours	032	136	.149	050	1				
6-SOC Emotional Connection	.269**	412	.016	201	.067	1			
7-SOC Neighbour Trust	.075	.352**	053	.126	.025	347**	1		
8-SOC Mutual Influence	.110	.259	.051	.301**	.004	.178*	.178*	1	
9.Participation	.096	.122	.481**	022	.149	.082	.122	.002	1

^{*} Correlation is significant at the 0.05 level (2-tailed).

8.2 Associational Indicators

As stated in the methodology and literature review sections, indicators of associational activity have been popular in the study of social capital (Schuller et al., 2000). Table 8.5 outlines one indicator of associational activity – membership in not-for-profit organizations in each community.

The lists of volunteer associations were identified through a volunteer database and verified during preliminary contact with the town clerks of each community. When asked to describe the level of activity for the groups, the town clerks of both communities stated that one group was more active than the others; for Bigcove, the Fire Department was identified as the most active group; and for Dorytown, the Tourism Group was identified as most active.

Table 8.5 Associational activity for Bigcove and Dorytown

	Bigce	ove	Dorytown		
	Group	Membership	Group	Membership	
Volunteer or Not-	Town Council	3	Town Council	5	
for-Profit	Fire Department	19	Tourism Group	10	
Associations	Firettes	11	•		
	Recreation		Recreation		
	Committee	3	Committee	8	
	United Church		Anglican and		
	Women	29	United Church		
			Groups	10	
Total Membership		65		33	
Volunteers as a % of residents aged 20 and over*		16.9%		12.5%	

^{*}Percentages calculated based on 2006 Census Statistics

Membership numbers presented above were later obtained from representatives of each group when interviewed. Overall, membership appeared greater in Bigcove than in Dorytown. When comparing membership in volunteer organizations per community, Bigcove appeared to have a higher proportion of volunteer members over the age of 20 than Dorytown (16.9% and 12.5% respectively).

8.3 Interview and Ethnography Fieldwork Data

The following themes were identified through the transcript analysis. Initially, the analysis was more deductive in nature whereby transcripts and notes were reviewed for themes associated with identified theoretical concepts such as extent and types of social capital networks (between residents, between communities or with external development resources), participation or civic engagement and volunteering. However, as it progressed, the analysis became more inductive by identifying new themes that were relevant to the phenomena observed. The new ideas were further informed by new literature searches.

8.3.1 Participation and Observation of Community Networks and Volunteer Activity

Over the course of six months, events in both communities were attended to observe community networks, participation and volunteering (often indicative of bonding social capital) and build relationships with residents.

Bigcove - Community Events Participation and Observations

Community events attended included the firemen fundraising bingos, Women's Church Group annual harvest dinner (for the community), Women's Church Group annual Christmas potluck (for the group members) and church services. The two groups with the greater number of volunteers were the Fire Department and the Women's Church Group. The volunteer activities of the Fire Department consisted of a weekly bingo which provided revenue for its own sustainability. The bingo accounted for a large proportion of hours of volunteering in Bigcove and had greater attendance than other events; people from several neighbouring communities participate partly due to its location (outside Bigcove, on the main road that connects Bigcove to other communities). The Women's Church Group anniversary fundraising harvest dinner in the fall at the town hall was fairly well attended. This group also held a Christmas party for their members. There appeared to be much support and camaraderie shared among the over 20 members. It was apparent that through this group, many of the women had strong supportive relationships, which are health beneficial. During the fieldwork, there were no free events for residents. This could have made it more difficult for some of the residents of lesser means to participate and benefit from a wider network of support.

The recreation committee of Bigcove did not host events during the six-month period.

No other events took place in the community. Overall, there were few events in the community during the data collection.

Dorytown - Community Events Participation and Observation

In Dorytown, events attended by the researcher included a flea market for the recreation committee, a fire on Guy Fawkes Night, a Community Harvest Dinner, an Annual Christmas Tree Lighting Ceremony, a weekly bingo for the Recreation Committee and church ceremonies. It was observed that community members who were not part of the organizing committees often volunteered to work at events. Community participation appeared to be quite inclusive; events were attended by a broad representation of community members (elderly people, mixed socio-economic status, children). At the annual Christmas tree lighting ceremony, residents gathered by the Christmas tree outside the community centre, and volunteers played music and sang Christmas carols. Attendees were offered free hot chocolate at the community centre located in the centre of town, within walking distance of most residences. Other events that were not attended but occurred during the six-month period included the Christmas dance, Seniors Christmas Party and a Variety Night (skits and music). In addition to the weekly bingo that took place in the community, the recreation committee held events with the purpose of gathering residents to socialize. In summary, social events in Dorytown appeared to be attended by most community members.

8.3.2 Social Capital Interview Findings

The interviews with community leaders, residents and government officials revealed themes regarding the three types of social networks referred to in the literature as bonding, bridging and linking social capital.

8.3.2.1 Bonding Social Capital

The interviews in both communities revealed characteristics of bonding social capital, or the relations, bonds and networks between people within the community (family members, friends and other community residents within the community) (Gittel &Vidal, 1998). Themes relevant to Putnam's conceptualization of social capital – participation and volunteering emerged from the data.

There were very few similar bonding social capital themes between the two communities.

A theme that was common to both towns was that of volunteer fatigue.

Bigcove - Volunteer Fatigue

Volunteers on the fire department described being "worn down".

M: So what do you find the most challenging about being involved in an organization like this?

D: Time. Time, right now we're shorthanded. It's only once a month we have to go to Bingo. Year after year, it gets you wore down after a while. Then you have to split up and make three ...? It kind of drives you after a while. We set up a schedule in the Fall, but it never works out that way because workers up here have their own schedule. You're doing shift work up in the plant and get called in, and then there's the fishermen too, on long liners, they can't stay in to volunteer. Like now we've got five gone. I've been gone three four weeks in a row.

One of the Firettes members also spoke of this fatigue:

B: Volunteers get tired of it. Like this year when we had our first meeting, I said we're gonna lay low this year, I don't think I'll be president. And the girls say

"no no no you can't you gotta take it again" So then I feel bad and I do it. Once a month we meet, there's about 10 of us, we each do our turns on the bingo.

Similarly, Dorytown volunteers commented on the challenges to succession of volunteering to future cohorts

Dorytown - Volunteer Burnout

As in Bigcove, some residents of Dorytown also spoke of volunteer burnout or fatigue.

The former mayor describes coming to his decision not to run for mayor for another term:

J: When I told (the town clerk) that I wasn't going to run for council again. I sort of decided like I explained to (her) that when the love goes out of something, then it's time. Time to pass it on to someone else and I felt the past year I haven' functioned as mayor the way I should have functioned, to look at it and go another term and feel the same way ah, I said no I think I'll pass it on. It do take a lot out of you, you attend a lot of meetings a lot of functions and after a while, it takes it toll. There's gotta be people out there in the community that can take it over and take it farther, and it's gonna be interesting.

A Tourism Group volunteer also spoke of upcoming challenges in finding the next generation of volunteers that will replace the current ones.

Themes for bonding social capital in Bigcove included 'comparisons with volunteering prior to the fishery decline', 'low levels of desire to volunteer and participate', and 'vandalism as a disincentive to volunteering'.

Bigcove - Volunteering and Participation Prior to the Fishery Decline

Many residents of Bigcove spoke of a more vibrant social life before the cod moratorium.

A local farmer who had volunteered on committees during that period and his spouse compared the level of social participation and volunteering before and after the fishery decline.

C: When the fish plant was goin' everything was going...But recreation committees we got that done in '82, we got the ball field done, and teens the

women, the children, everybody in the town. And then we had [Bigcove] Day, we used to have every year.

In the following excerpt, the farmer explained that prior to the moratorium, more volunteers were active in writing proposals to obtain government funding to improve recreation infrastructure. He also explained the importance of fundraising. The two following excerpts express that prior to the fishery decline, there were more residents in the town that had more money, which facilitated fundraising for project money.

C: Oh it's true. We started that down here, the recreation committee.

M: So when it first started up what did it do?

C: Well it was mainly the baseball thing going, we had teams there we got grants to do the field up you see, then we got the fence to put around it then we got the stands built, and we'd sell tickets and raise money and have dances and, boy, people in baseball, have a party you know it was good, everybody was good yeah.

M: And so also I know there's a park there up by the pond. And there was a stage and all that. The recreation committee tried to put stuff there.

C: Yeah for the camping, oh that's still done up.

M: Oh OK so that was done with project funding.

C: Yeah. But we used to raise money too.

T: Yeah there were ball teams every year, the kids looked forward to going and signing up for ball, even the little ones yeah T Ball, right up. But that's all gone.

C: Everything went.

M: So is it the case that everything went when people started moving away and when did people start moving away?

Both: When the plant went down.

M: So what year was that?

C: '92. Yeah.

He also described activities of the fire department, explaining that at the time of the fieldwork, the bingo serves as the main volunteer activity and fundraiser.

C: When the fire department, we went and bought our own fire truck-\$100,000-we went and raised our own money then (before the moratorium). That was bingo games, selling tickets up to the plant 'cause like I said there was money flowing everywhere then.

M: And they still do OK with the bingo considering there's not many people around. That's their (fire department's) main fundraiser.

T: Oh yes bingo yeah.

M: That's why they're still able to exist.

Bigcove -Low Desire to Volunteer and Participate

One female community leader describes the decline in social activity for the community and lack of community togetherness.

G: In the '80s, there was always [Bigcove] Day, there was a ball field that was very active and there were dances at the Legion. Now, the Legion is closed. There is a complete decline in social activity. You still have house parties but the community isn't all together anymore. Seasonal Xmas day pageant doesn't happen anymore. There used to be a seniors club, 50+. that is no longer there.

Residents spoke of difficulties in recruiting volunteers for recreational events in the community. Community leaders described it as a lack of interest. One former female volunteer said "People love to complain about what's done, but they don't offer to help out." One of the leaders in recreation told the researcher that they were going to have to cancel their festival day this year because of a lack of volunteering. As of summer 2005, there was no longer a recreation committee in the town. Another community leader spoke of a lack of togetherness "People's just not together anymore". Members of the fire department described their own challenges in that regard as well:

M: So then volunteering is a challenge 'cause it's hard to find the people.

F2: Yeah, there's no young people coming on to join us. They don't want to have to do the Bingo on a Friday night.

During informal conversations, a town council member stated that they had not received new nominations for town council. Some positions were being left vacant.

Bigcove - Youth Engagement/Vandalism

Some residents spoke of a vandalism problem in the community, particularly with respect to property built by volunteer groups. They explained that the vandalism was acting as a disincentive to volunteering. That is, residents were not motivated to give of their time and resources to build things for the town in the event that it may be vandalized.

M: And someone now. People who were on the recreation committee were telling me they find it hard to when they try to get money for a project and build something for the town and it gets vandalized and stuff.

C: Oh yeah.

T: That's why they moved the playground here now by the town hall, and have a big fence around it. It was over by the baseball field out behind the old school, but it was getting vandalized all the time.

C: Well they know who's doin' it, I know who's doin' it.

T: Everybody knows who's doin' it but you say anything and it's just blowed off.

C: Well I used to get up with the goats every morning, I get up one morning and I seen those fellas. They're up too early I thought. So I watched them, all of a sudden, the bus shelter was gone. The bus shelter that the recreation, we, raised money and built and put it there for the kids to get in, and we had 'em all over the harbour right? Everywhere there was a bus stop there was a shelter. And the shelter is gone, I see those three young fellas anyway, there they is bringin 'em out of the woods, pieces of plywood they were gonna build a camp. They got right out in the middle of the bog right? And I said the best thing for me to do is to go and tell the parents. I went and knocked on their door, she comes down in the nightdress. Is the man of the house here? No. I said we'll you're good enough come on I got to show you something. I said there's the bus shelter look, and I said that's your youngster, so I said, I'll let you handle it. I won't say nothing at all I'll let you handle it. She go on and let them build the camp.

Another recreation committee volunteer recalled:

M: Recreation committee did up the ball field and play ground then. They moved the playground now; the big kids were doing too much damage to it right? And now it's in a place where more kids can enjoy it.

It appeared as though the vandalism problem had the effect of deterring or scaling down social activities for youth as well. When asked about activities for youth, one council member stated that they couldn't use the town hall to host youth events for fear of it being vandalized. Another interviewed resident and former recreation committee volunteer stated:

M: We used to do a dance for the teens up at the town hall (that's where we have everything) but the kids are getting too rough now. We wouldn't want a chair to go through the wall or anything so we don't have that anymore.

Dorytown - Networks Within the Community, Volunteering, Participation

Themes from the interviews for bonding social capital in Dorytown included 'volunteerism', 'collaboration between community groups', 'general and youth participation', and 'volunteer fatigue'. These are described by the following excerpts.

Dorytown - Volunteering and Participation

Government representatives told of the broad volunteerism and participation exhibited by residents during the annual festival;

N:... the fact that every household contributes.... that's unheard of! That level of community participation is a huge success factor and it speaks volumes to the whole festival itself and it speaks to the value they have for the investment that's gone into their community and if you drive by now you'll see all the picnic tables there in the back of the shelter they've built and they're not protected because they don't have to be concerned about people damaging, there's too much buy in it's just absolutely amazing the level of buy in from that community. Every single family and every single individual has bought into this [tourism] as the direction that they're going to be going in. It's really moving to go down there during the festival; it will blow your mind.

Members of the Tourism Group explained how the festival (largely supported by volunteers) is a critical part of sustaining tourism planning and other activities throughout the year. Funds generated through the annual festival are used to provide the required proportion of funding that enables the group to access government grants for their tourism strategy:

M: Oh no never [refuse to help], and we call around during festival time and ask people to prepare a potluck dish, a dessert and if possible a Jig's Dinner and that's a lot to ask of everybody right? And that's a lot to ask of someone but I don't think we've ever gotten turned down other than the odd time, but I think 98% of the people do it. Now they may not all cook a jig's dinner, they're not all comfortable with the jig's dinner part particularly the younger people, so we don't get them all but everyone in the community usually does a potluck dish and usually a dessert. They keep the food going for Thursday and Friday, and then the jig's dinners on Saturday and Sunday, now we do have to cook because not quite enough comes in, we provide the meat and the vegetables for the jig's diner 'cause you can't expect them to provide that but they provide the potluck dishes. So then of course you're getting people to work in the kitchen and the games booths. And the festival was one of the things that we identified right and the funds that we generate through the festival is what keeps us going throughout the year and are able to do other things with the community through ACOA funding or Service Canada funding. We can pool more funds. So without the festival we wouldn't be able to do any of that 'cause you know there has to be some part of cash advance to do all that. So it's important. And it's important to the community too, I think it gives them this sense of pride too that they're able to do this really nice festival for people from all over.

As reflected in the above excerpt, residents of Dorytown appeared to have a great sense of pride and valuing of their community.

When asked what the main asset was in working as a community group, the Tourism Group representative explains that regardless of the time of year or typical schedule of events, community members can be called upon any time to help:

M: Again it's [the biggest asset] mainly volunteers. The fact that we are able to call upon the people of this community and I would say that is the greatest strength because we can only do so much but you've got to have the support of the community. Well I think the fact that we do have people who want to volunteer. [For example,] We have a group of women that serve our jig's dinners that we call upon for any functions. We just have to say to them "this is happening" and they're there, they're cooking, they're baking, they're serving. Where can you find that?

F: and how many would that be approximately?

M: Oh my gosh, there's at least six or seven. I mean you've got, around six of them [ladies] that we call upon and they'll get any others that they need you know? But they're fabulous like that, you know, we got somebody... Coming and they wanted a jig's dinner we just called them "Yes no problem at all we can do that.." you know? And it's done you know? So that means a lot for us. We have others that might you know just cook for the festival and but it takes all of it but we have a strong volunteer base.

This illustrates a strong sense of volunteerism in the community.

Another Tourism Group male representative explained the impact of volunteerism for tourism activities in Dorytown. He described the dedication of volunteer committee members.

C:...an organization is only as strong as its members. To be able to sit around the table 52 weeks of the year, you know nine or ten or twelve people and have a great relationship and not have friction or jealousies or power struggles within the group and we have never had them. We've never had that stuff, we get along perfect as I say four or five of the main players are still there, we're still in the same positions. So it hasn't been a challenge it's a blessing. So that's the first challenge make sure to work together.

He then talked about the critical role the other communities play when volunteering for festival activities.

C: Everybody volunteers to do it! Some say I'm not gonna do it or cook any dinners this year but when it comes down to we need an extra 30 dinners, bring it over we do it. It's a big task you know and community residents want to participate too but you know you're home cooking and where you could be listening to the entertainment you know 60 hours of live music that we provide. You probably miss some of those things as a volunteer.

The above quote illustrates that although volunteers are willing to make the personal sacrifice of missing out on the activities because they care and want to work for the success of the festival.

The importance of volunteers was also mentioned by those community members who were less active in volunteering:

F: People from the town make crafts and sell them at the festival?

T: It's the volunteers who keep the festival going every year. Only for the volunteers, there would be no jigs dinners, no potlucks, who would donate their time in the booths, whatever, the entertainment, it's always volunteers."

Dorytown - Partnerships between Community Groups

Government officials spoke of the collaborative networks between different groups in the community;

There's a lot of partnership in [Dorytown]. Lots of times, the town is doing an initiative, TG will be a partner in that and ,you know, they may not contribute money all the time, but you know they will contribute their expertise and the town also does that. It's a good network there in the whole community.

A senior resident and Tourism Group volunteer also underlined the relationship between the community groups. The Tourism Group was utilizing a facility built by the Recreation Committee:

F: What about social organizations in the community. Was there more before than there was now or?

S: Well yeah, the town council and the Recreation and the Tourism they are the three main organizations in the community and they're lopped together like one. The town council and the Recreation have been working together after years and years and years. That's the reason why our town is progressing, although small in numbers because of the socialization of the main groups that are here. And the churches are coming together like you know The community spirit has grown here over the last 30 years in this community. We've been fortunate we've had more income, as a result of us coming together and as a result of tourism and recreation and so on ...

Other examples of residents volunteering for the benefit of the community include the work that was done to the old school to restore it as a community centre. This example also highlights the collaboration between community groups. A Recreation Committee leader explained:

The school was about to be bulldozed down. Sam went on to the committee in July '98. Tommy went up and did all volunteer work, and laboured for about two or three years. The projects started to come out. The town applied to the HRDC employment benefits officer at [Regional Centre]. [Recreation Committee leader] filled out forms and went after that money. They applied for two projects. They needed to do a lot of work on the school to save it. Water froze and busted some pipes and the windows were busted up by kids, etc. Some others pitched in but Tommy did lots of work. Stephen did too, there were five or six people.

The Tourism committee could use the building as a meeting place for the eight members.

The recreation centre is also used every Sunday morning for Sunday School. It was successful because everyone pulled together.

Dorytown - Youth Engagement/Vandalism

One of the community volunteers mentioned that she would like to see more activities for youth. However, she remarked that there was a good level of youth engagement in the community's tourism strategy and some of the volunteers had been successful in obtaining funding specifically to engage youth at risk.

M: For the young people you know, there's not a whole lot for them to do. Recreation has an arcade and they're struggling with that, you know, trying to keep it open. Having said that, you know, there's no vandalism, like there's nothing being broken in the night like our signage we got around town, there's nothing being destroyed. The plants we [and the youth] plant in the summertime, there's not even one being pulled out that I've been aware of. In the summer time, the young people sit around across from the tourism building with the plants all around and to my knowledge there's never been a thing done to the building or to one plant, you know. I guess in many ways the youth takes pride in it as well and I think that's another challenge for us you know getting the youth more involved.

F: Apparently there's some youth projects that you guys are looking into.

M: Well we've got one approved now actually called youth skills link. So we've got six people coming on next week for that one, which will be at-risk youth, not employed, hopefully get them back into the work force. But other than that, everyone is comfortable in [Dorytown]- I don't lock my door. I go out and leave the doors unlocked. Now whether that's a false sense too, I don't know.

She explained that many organized activities for youth are in the nearby larger town and are also expensive, which preclude many from participating in them. However, she described that in the local recreation/community centre, the children have the advantage of using the gym for sports like ball hockey:

M: Yes you can get a taxi into [the neighbouring larger town] any time but it's the cost. It's too expensive. And again, money isn't flowing, a lot of people can't afford still to put their kids in hockey or figure skating or ballet or dance or anything like that. So you know. I think an outside rink is needed in [this town] even though you can come here (the neighbouring larger town) and get involved, many can't and really the majority don't you know honestly, when I look around and think about the kids. Like my daughter is the only one I know of. That's why I think it's so important to have things like the Rec Centre that they open up for floor hockey for the kids, you know I think that's great. A nice place to go. Same with the winter time with ice hockey. And the Arcade too, I think it just needs a bit more work as to how do you maintain it and are able to keep it supervised all the time. It's nice to have things where the youth can be involved. And you know I think that even though you don't have the things that larger centres have, I think that for raising kids, it's an excellent place. They can just go out and have fun, they're safe. They can just go on in the beach in the summertime.

A government funding representative observed that although opportunities for vandalism to the Tourism Group property exist, there are no occurrences.

N: ...if you drive by now you'll see all the picnic tables there in the back of the shelter they've built and they're not protected because they don't have to be concerned about people damaging, there's too much buy in it's just absolutely amazing the level of buy in from that community. Every single family and every single individual has bought into this as the direction that they're going to be going in. It's really moving to go down there and see it during the Festival...

8.3.2.2 Bridging Social Capital

Interview data also revealed that bridging social capital, or the building of outward-looking connections (Gittel & Vidal, 1998), across communities with similar characteristics or levels of authority or resources (World Bank, 1999), is greater in Dorytown than in Bigcove. The following is a description of bridging social capital in Bigcove and in Dorytown.

Bigcove - Reluctance to Work with Surrounding Communities

Analysis of the interview transcript also found greater evidence of bridging social capital (the building of outward-looking connections across communities with similar characteristics or levels of authority or resources (Gittel & Vidal, 1998; World Bank, 1999), in Dorytown than in Bigcove. The following is a description of bridging social capital in both communities. For example, they fought a proposal to amalgamate with neighbouring towns, which would have resulted in decreased operation costs and debt.

Residents voted against the amalgamation by over 70%. Many felt it would threaten their use of the town hall (used for gatherings) and the existence of their fire department.

Some members of the Fire Department explained:

F1: Yeah. Well it was other things too. Basically we were just as well off as we are now than if we amalgamated with them.

F2: Well this would have closed, this building, if we became a part of that. That fire truck wouldn't have been down there, that would have been gone to (neighbouring larger town)...We need this building here, this building brings people together. Yeah they still have card games here don't they? Birthday parties, weddings, baby showers, barbecues.

Dorytown - Collaborative Networks with External Groups

The reported ability of Dorytown to work with neighbouring towns both toward the provision of basic services and in terms of achieving tourism goals was evidence of bridging social capital. One of the town councillors explained how forming networks and cooperation with neighbouring communities had enabled them to obtain basic services:

G: Like the engineer they got up there in the next town comes over and gives us a hand too you know he's more advanced on lift station panels and stuff and we were paying him only little, like 50 bucks or so, so that's where we saved money. They're the ones that allow us too you know they're good, the council over there you know...Oh we're all the same fire department too. You know, we give a donation there and they serve us too."

M: So when you saved money, what does that free up money for, just for running the council building, [or is it] money for projects?

G: Yeah that's right you need money for projects 'cause you gotta pay a percentage, right? Well, like I said, we got the street lights back on too, and we always got money there for snow clearing instead of ending down in the red all the time.

A Tourism Group leader also stated that it has been able to develop, jointly with other neighbouring communities that are part of a tourism board, a small program that encouraged residents from the region to learn more about the tourism attractions in the area, and become ambassadors to others.

B: ...Through the regional tourism committee, the education one that I chair we came up with the idea of ex-certification. ...And we wanted to do it so we could probably offer it free of charge for people so we contacted all the people in our region who were experts in these areas and so we asked would you volunteer to come in and do a session for us this evening. So we had I think it was 12 presenters [from all over the region] in the three evenings last year and people volunteered their time, and came in and actually we even got [the director] from [well known regional theatre company], who did a little session for us and we had [representative] down from the [Regional Heritage] foundation and we did one on the bungalow and one on the [historical settlement vessel] and one on the built heritage. Parks Canada came in for the (historical merchant building), John came in and did one on subsistence so it was fabulous. We've done it for two years now and they come over and they do fabulous presentations. We organize it

here at the college, we have it in the Cafeteria, we bring all our equipment out there and Powerpoint and stuff.

Networks with tourism representatives from other communities were drawn upon to create the course. This provided evidence of bridging social capital between Dorytown and other similar communities. Below, she described that the result was a high quality training course that received recognition at a provincial level, illustrating the positive outcomes that can result in part, from these types of networks:

B: Yeah and we were nominated actually for a provincial award for CED award for education and innovation...So we were pretty excited about that. We were one of the three finalists.

Members of the Tourism Committee participated in regional organizations where they networked with other communities. One Tourism member described her involvement in several groups:

M: I'm on the Action Committee for Tourism and I chair the Education Subcommittee of that group, I'm a member of the area's Chamber of Commerce, I'm on the (neighbouring town) Historic Townscape Foundation, I'm on the [regional] Tourism Association, so chairing a committee on that right now for Clusters and Corridors, trying to organize the region into clusters and corridors. What else... the education subcommittee with the zone board.

Another Tourism Committee member talked about his involvement with the regional tourism board:

C: some of the major players have become the Regional Tourism Association, like I was chair for two years and VP for three, and John fisher in the next town is a new chair you know we've had directors from the regional centre for the Regional Tourism Association and now we want to work regionally.

8.3.2.3 Linking Social Capital

As with bridging and bonding social capital, interview transcripts contained information on linking social capital, or capacity to leverage ideas, resources and information from

formal institutions beyond the community (World Bank, 2000). These characteristics are described below.

Bigcove - Difficulty Working with Government Funding Agencies

There was little evidence of linking social capital appeared in the interviews with residents of Bigcove. As will be seen in a further section describing leadership in the community, their leaders reported more difficulty working with funding agencies.

Residents who were involved in volunteer groups which had applied for government funding spoke of the difficulty in accessing these types of resources. One former recreation committee representative described this problem:

Ma: The problem with projects now is that they're not getting the ones they're applying to. For example, the recreation centre applied in 2004 to upgrade the shack by the pond at the municipal park up there just to re-do the kitchen counter and add a stage and they told us the money ran out or they said we couldn't get it 'cause we were applying to build something new rather than fix up something and that wasn't it.

The government funding representatives interviewed were asked about their experiences in working with Bigcove representatives. They reported that the community generally approached them for funding because other communities had received funding.

According to the funding representatives, Bigcove leaders argued that their town was entitled to receive funding on that basis, and were not interested in developing a strategy for the community:

N: A lot of times, I would bet the volunteers either don't have the capacity or don't have the time to develop what we require in terms of documentation to look at a proposal through our channels and that's probably the most significant factor, not the capacity or time. So sometimes it's lack of assets too, like Bigcove is a beautiful little community but they don't have or haven't identified that unique selling feature that can move their community forward.

M: And they don't have the same kind of community groups?

N: I think that's a big factor too, that leadership like the one or two people that really drive things and move them forward. It's a very different community. In some cases groups haven't identified that uniqueness about themselves and I think that until you do that, if you're just trying to be the "me too" community, that says well we want to have a trail like this group has or we want a trail around a pond like this community has... as long as that's the path you're going down you'll never really excel I don't think, the way that Dorytown has.

Dorytown - Regional Networking/Relationships with Funding Agencies

Dorytown's increased leadership representation on regional boards had led to better networking with representatives of funding agencies, and the creation of working relationships conducive to the development of successful funding proposals, demonstrative of better linking social capital. Funding partners described Dorytown leaders as being well connected to regional committees and recognized by funding agencies:

N: We quickly get to know who some of the lead groups are in terms of community development and I don't imagine I was here for a month and I had met Tourism Group leaders. And the volunteers on that committee tend to wear many hats so I probably met them through other circles prior to meeting them through Tourism Group

M: Like from being on the board of the peninsula's tourism board?

N: Yeah, like the peninsula tourism board, the College and the local Tourism Association, and the Chamber, I bet there are probably three or four other committees they're on but you meet them quite quickly and easily and they're the type of people that if there's something on their mind, or something they'd like to approach you about they will approach you and so. They have a different outlook, like they see the big picture, ... they're so well networked they have a lot more support regionally which goes a long way so if I talk to someone in the regional hub about what's going on in that town, I bet they would say yeah I know about that. But if I talk about some other communities where the people involved aren't so well networked, people aren't familiar. So that kind of regional perspective goes a very long way because in terms of ACOA dollars there just isn't enough for every community to have a little bit. We have to really build up, I guess take a much more regional approach and build on the strengths of the communities that have something to give."

Tourism Group leaders explained that they knew the funding agency representatives through their other works: One female leader explained her involvement in several regional committees.

M: Well like my role here of course, College role, I was involved in things not only here but I was district administrator for 5 campuses so you know I was very much involved in the region with the funding agencies like ACOA, Service Canada and these types of things, and as a result I had a lot of contacts as well developed which really helped as well.

Another Tourism Group member interviewed separately commented on the networks between Tourism leaders and government officials. He also explained that although the social connections had merit, the quality of the proposals and track record of meeting or exceeding objectives played a significant role in their continued success in obtaining funding.

S: Tourism Group hasn't found it difficult to get projects because ah, we are a well educated group that's well informed and in close contact with government officials, like [M]. She's there at the college she knows what all the government officials and [C] over there he's our spokesperson, he's familiar with all the government contacts that's going on, and he knows everybody and so... he's on all the other big regional ones [Discovery Trail] and he knows the ministers both provincial and Federal and MHAs and so on and so forth, and that's it but that's not the main reason why we get the projects the main reason why we get the projects is not because of who you know, it's because of the use that our projects has provided for the community. Not only work, our mandate is not work, our mandate with Tourism Group is to bring tourists in there and to create jobs through the tourism industry. We're doing OK because the government sees that the things that we've put here is good for the community and will create some jobs like the park will create some jobs over the years, we're just building up on it now, we're just working at it.

Both Tourism Group representatives and government funding agencies commented on the importance of the quality of the relationship between the group and funding agency. When asked why the Tourism Group had been successful in obtaining funding, government funding representatives stated the frequency with which the group initiated contact was important, the skills of the group members, broad associational involvement

of group members, and the establishment of a track-record. From the community's perspective, important characteristics of funding agencies were the willingness to meet frequently, provide feedback on proposals, and answer questions in a timely manner. A Tourism Group leader explained:

M: Yeah, we have the most fabulous people working from these departments in this region, I cannot speak highly enough of them. The people from ACOA will come and sit down and give you direction. They're very approachable; they will come and meet with you whenever you want. We've got [Pauline] and [David] there from Innovation and Trade, they are fabulous.

8.3.2.4 Community Confidence, Collective Efficacy and Democratic Practices

Interview transcripts also contained evidence of reviewed social capital indicators and concepts; community confidence, collective efficacy and democratic practices.

As stated above, community confidence or a positive belief in the future of the community, has been proposed as a psychological predictor of social capital (Long & Perkins, 2007). The concept was apparent in some of the interview transcripts of the Dorytown residents. Both Tourism Group members and other residents stated that the community believed in, and supported the tourism plan. As one Tourism Group member stated:

S: We've got the community behind us and we put off our festival when we do anything the community is behind us 100%.

A community volunteer and resident also reported being confident in the future of tourism in the area:

F: And as far as the future of [Dorytown] goes?

G: It's tourism that's gonna keep 'er goin'. You know the tourists and stuff. And also the retired people who come up and the scattered buying up property and living in the summer. You'll get people coming back home, people gone from this

town for years and still own land there, they'll be coming back and building up too there. That's one good thing you know.

Dorytown Tourism Group volunteers also stated that over time, they were able to strengthen resident belief in the effectiveness of organized community action or 'collective efficacy', and further explained that belief has motivated most people to volunteer.

M: We're very fortunate with the volunteers but we want to get to the point where we can pay all these people too. I think we're only going to begin to see the job creation from it now actually in all honesty. All that we had to do until now had to be done and to reach a comfort level as well with the community, they had to see that the tourists were coming and enjoying the experience.

The Tourism Group volunteer explained that a growing confidence in the Tourism strategy is beginning to motivate people to start businesses.

M: ... They had to see people going to the visitors centre and saying is there a tea room around, so now something will be happening with the Orange Hall and the Bird Island B&B is also going to have a tea room there. So it's a good start.

This Tourism Group volunteer described how the Tourism Group wanted to study the heritage of the community and build that into the tourism strategy. They had paid special attention to educating and involving community members so that they could build a sense of pride in it and belief in it (i.e. collective efficacy):

C: ...we wanted to make sure there'd be some left down the road and we also wanted to instil in the community people a pride in the cellars and in what we were doing. And pride came with volunteering and partnership, that kind of stuff, ay. We wanted them to learn and get a pride of what - the root cellars became a symbol, became an icon of the cultural heritage of this community. And there's one thing we wanted to make sure that we identify with the community at all times so the root cellars is more than a physical structure, as a people, as our cultural heritage and the community bought into this. They bought in complete with us and having established this and we got our second grant to restore our 20 that we did, we repaired our 20 cellars in the most historic parts of the community - like on Old Point road.

A government funding representative also described the community's belief in, and support of the tourism strategy in Dorytown:

N:...With that community just the buy in blows my mind... the fact that every household contributes, every household brings something to that dinner, that's unheard of! That level of community participation is a huge success factor and it speaks volumes to the whole festival itself and it speaks to the value they have for the investment that's gone into their community ... there's too much buy in it's just absolutely amazing the level of buy in from that community. Every single family and every single individual has bought into this as the direction that they're going to be going in. It's really moving to go down there during the festival, it will blow your mind.

Dorytown - Civic Engagement/Democratic Practices

Putnam's (2000: 2004) work described civic engagement as an important component of social capital. Several Tourism Group volunteers described their decision-making practices as democratic. They stated that they always strove for unanimity in decision-making. This type of democratic decision-making was described as contributing to resident engagement:

C: We always done everything by consensus. We discuss it. We use conflict resolution if we disagree. We always want to make a unanimous decision. Unless everyone is satisfied, we generally don't go ahead.

Another more elderly tourism volunteer who was a teacher and a professional photographer explained the committee dynamic in a similar manner.

S: We all work together, and we agree and disagree but we still agree. Might not be agreeable to everybody but finally we come to an agreement. We never get out of sorts, we never have a fuss about anything. We've got the community behind us and we put off our festival when we do anything the community is behind us 100%.

8.3.2.5 Catalysts for Social Capital: Leadership and Human Capital

Though the project explicitly set out to research the role of social capital in LED, interviews revealed the importance of two very important factors that contributed to its

effectiveness in achieving LED successes and other community development outcomes, namely 'leadership' and 'human capital', or skills and abilities of volunteers. That is, leadership was often mentioned as instrumental to succeeding with funding proposals and influencing community participation. Also, residents spoke of many instances in which residents volunteered their skills and knowledge (human capital) to offer better services to residents, write successful funding proposals and maintain the community's tourism website.

Leadership

The interviews with government officials particularly highlighted differences in leadership between the two communities. Interviewed residents and funding representatives felt that Dorytown possessed leadership that acted very much as a catalyst for increased community volunteerism and participation towards the success of the tourism initiatives. The following is a depiction of leadership findings for both communities.

Bigcove - Leadership Required for Success in Funding Proposals

Government funding agency representatives commented on a lack of leadership in Bigcove that was capable of moving proposals into a project-approach that they require to invest in communities. For example:

N:...until that champion comes forward, jumps up to the forefront and says they're eager to move forward and says we're open to move into your program kind of approach but until that happens...

N: when you meet the leadership in that community, they are very nice but, when you're talking planning and community development it's a completely different person, it's very negative and it's why are they (other communities) are getting this, (rather than focusing on the planning), and meanwhile they should be excited about nearby communities getting money because it's bringing people down there

and traffic down there that they can really tap into in terms of job opportunities and perhaps of visitation if they can identify their strengths but until the investment is directly into their community it's why? Why? Why? And I don't know how we get past that, but it is I think it's something that's a bit of a mindset. ... Some places are getting past the mentality of competing against each other but it's still there in others.

Dorytown- Good Leadership Promotes Success

Key informants described how community members asserted their leadership by responding to a crisis situation. Past and present town council members of Dorytown described the lights being shut down by the hydro company in the late '90s as a "wake-up call"; they stated that the town was going downhill fast and someone had to step in so a few community leaders nominated themselves against the then-council and called for the formation of the Tourism Group and a recreation committee. "There had to be a shake-up" one of the leaders stated. Then he spoke about calling for the committees and the overwhelming community response "It seemed like everyone was on board". He went on to describe how the previous lack of leadership had stifled progress in the community.

J: So I think in tourism itself we should have been, like it took us 8 years to get to now but really where we are now it should have been done 20 years ago. We should have been there 15 years 20 years ago. We should have if we had the leadership that we had now. The leadership wasn't there but it showed in '92 that it wasn't there and I think that the council at that time didn't want the town of [Dorytown] to improve. Some conflict there among councillors brought it about and you see something going like that you say to yourself, it's time to do something, it's time to step in and see what you can do.

It appears the leaders acted as catalytic agents for the mobilization of community volunteer resources. Eight years later, the same core committee members were involved in the Tourism Group. Tourism Group volunteers spoke of the importance of good leadership:

S: It'll be successful because it has a good board of directors. There are good people on the board that are well educated and are good volunteers. I don't know what that's going to be in the future getting a good board of directors. I've been

there for a long time but you know if I goes out, you want to replace me with another good member who is just as good as I am.

M: Well I don't know about that.. (laughter)... but so that might become a challenge as the population decreases again in [Dorytown]. Is that what you think?

S: It might be more of a challenge, but if some of our educators decide to live in [Dorytown].

M: Oh, yeah because there's still people who work in hospitals and schools and...

S: I think there are people over the years who will be able to do it. I think the best is there for Tourism Group to continue long long after I'm gone. That's gonna be created each year with tourism not only for the festival but tourists coming in there chatting and mixing with the public... and they talk to us. So with a continual draw for tourism and a good Board of Directors for tourism, it'll continue.

S: Leadership. Good leadership and good participation. I'm sure I'm right about it 'cause I've been at it all my life. I know good things come out of it.

Representatives of government funding agencies commented on the attitudes of formal leaders in the community with regards to developing project proposals. The representative from the economic development funding agency explained that leadership is critical to project success:

N: One of the key things I find behind any successful organization in addition to the strategic plan is the leadership and they have it right from the get go and they'd talk to you about the fact that their committee was established back probably 10 years ago and the people that run, two of the leaders in the Tourism Group in particular, they're doers, they're drivers, they're professional and no isn't an answer that they take lightly, I just think having that leadership around the table is what has gotten them where they are now, I'd say. It amazes me to see what they've overcome at the end of the day but ah, I don't think they would have without those two people in particular without the leadership in general in the community. I see other groups that I work with and without that leadership, we have to consider whether this is going to work or not and largely the champion of an initiative will make the difference of it succeeding or failing, it's a big factor.

The representative from the human resource development agency also commented on the leadership in Dorytown.

A: They have good people too that have been dedicated since the start that are still there now. They've got a variety of types of people you know with the types of background that they have; very experienced people, very professional people. They include everybody as well, some volunteers, some retired people, at least that's been my experience. They try to capture representatives of the whole community.

Human Capital

Early publications on social capital that considered the contributions of economists often compared it to physical and human capital (Coleman, 1988). Physical capital was described as materials and goods, while human capital was said to be embodied in the skills and knowledge acquired by an individual, which could contribute to an endeavour. Dorytown interview transcripts contained many descriptions of the manner in which volunteered skills contributed to community development initiatives. The theme was absent from Bigcove transcripts. In a previously presented quote, government funding representative commented that communities do not always possess the capacity or skills to plan strategically and write a proposal. Some quotes from the leadership section above lent support to the importance of skills and abilities. Further examples are cited below:

Dorytown – Skills Volunteered for Building Community Assets

Several key informants spoke of the volunteered skills, abilities and educational assets in the community. In the excerpt below, the former mayor explained that proposal writing and carpentry skills were volunteered in order to restore an old school into a recreation centre, which now houses the Tourism Group, a hall for ceremonies and youth ball hockey, a youth arcade, Sunday school and a community kitchen:

S: The school was about to be bulldozed down. Bob went on to the committee in July '98. They went up and did all volunteer work, and laboured for about two or three years. The projects started to come out. The town applied to the government, and Bob filled out forms and went after that money. They applied for two projects. They

needed to do a lot of work on the school to save it, but they had to volunteer all the work.

Pipe fitting skills volunteered to fix lift stations that supply water to the residents, which liberated funding that would go towards projects such as town beautification projects, or snow clearing and other essential services. Web design skills were volunteered towards the maintenance of websites for the Town Council and the Tourism Group. Within the Tourism Group, volunteers donated their skills to prepare initial presentations and proposals to obtain funding. One of the Tourism Group leaders described the time and skill involved in preparing that initial concept paper and MS PowerPoint presentation:

F: It was also good that you had the skills to do those things right?

M: Yes that goes without saying, like we had the technology you know here. [B] was part of (putting together the PowerPoint presentation), he later became technician here. We had [J], he was a fabulous resource from the natural area with the interpretation. [He] came up with the subsistence theme...how people needed the fishery in the past, the game the wild birds, the berries, the woods everything, we're gonna kind of interpret all that in there. So J came up with that idea."

One Tourism Group volunteer described the skills that many of its members contributed.

He emphasised the importance of involving 'educated people':

S: ...and then tourism came on board, seven or eight years ago, we were the ones that went ahead leaps and bounds because of M, she's there at the college, we've got [Ma] up here she's a retired teacher and a minister, we've got C a business man and a teacher and a man with all kinds of education...and myself a retired teacher. So all of our educated people put their all and all into it. We all work together, and we agree and disagree but we still agree. [At first, it] might not be agreeable to everybody but finally we come to an agreement. We never get out of sorts, we never have a fuss about anything.

Business leaders involved in the Tourism Group provided entrepreneurial skills, helping to generate new proposal ideas with a view to markets in the tourism industry.

A tourism leader explained that with funds generated through the annual festival,

Tourism Group was able to acquire a full-time person that is skilled in writing proposals,

and dedicated to working with funding agencies.

M: Well I guess that in itself [process of writing proposals], you know there's so many different little pots of money out there that it's difficult to keep up with it all. An advantage that we've had now the last couple of years that we didn't have before is that we have [our paid staff member]. Prior to that it was mostly myself and C that did the proposals ourselves, like I'd do some and he'd do some that sort of thing, so we did all of that so it's wonderful now having [the full-time employee] there 'cause she's been writing all of our proposals for us. And she's also really good at keeping up on what little pots of money are out there. Accessing funding you know that we wouldn't have had otherwise. And keeping in contact with the funders. We've had a \$25,000 grant for the visitors' centre, and then 800 from somewhere else, so these little pots of money that we can apply for that she's fortunate in getting. That's really, really good. The contacts are really important too.

Other Dorytown residents also annually worked on obtaining funding from Justice Canada, through a program which enabled at-risk youth to work on community projects relating to the tourism strategy. As previously mentioned these projects instilled a sense of community pride in young people.

8.4 Social Capital Discussion

The following is a review of social capital findings and a discussion of the methods used to study it, along with conceptual and methodological issues.

8.4.1 Profile of Social Capital

The literature suggested that a few cognitions predict social capital beliefs and behaviours. Of the three psychological predictors of social capital, 'community confidence' (residents' belief that conditions have improved and will continue to improve in the community) was higher in Dorytown than in Bigcove. This belief has been proposed to precede social capital cognitions and behaviours (Perkins & Long, 2002).

Interview participants were hopeful that the community would continue to develop and prosper, and were confident in the potential success of the town's tourism strategy.

Survey responses for proposed indicators of social capital were subjected to a factor analysis, which demonstrated that the questions seemed to measure distinct concepts, as suggested by Perkins and Long (2002). Though scores for Dorytown tended to be slightly higher than Bigcove, both communities scored moderately high on many of the SOC measures such as membership or a sense of belonging to a community, SOC neighbour trust (individual influence and sharing the same values), and finally two items measuring shared interests in the community and whether one cared about a neighbour's perception of them. These similarities could be reflective of commonalities in smalltown/rural culture. For example, residents of outport communities often have strong feelings of pride and attachment to their towns and being from a rural community is an important part of one's identity. Another consideration is the assertion that place attachment, taken alone, is not necessarily associated with resident engagement (Long & Perkins, 2007). That is, other types of cognitions likely lead to participation and volunteering. No differences were found in the 'neighbouring behaviours' indicator scores. It is possible that looking after a neighbour's house while they're away and borrowing something from a neighbour are part of an unofficial code of conduct in these rural communities.

Statistically significant differences were found on two of the five proposed indicators of social capital. Dorytown reported greater collective efficacy or the belief in the effectiveness of organized community action. Dorytown also reported greater emotional connection, a SOC subscale. This subscale refers to the ability to collectively solve

problems and whether residents get along with each other. Both concepts contain a problem solving aspect. The recent achievements of Dorytown discussed in the resident interviews, such as a stabilization of town services since a crisis period in the 1990s and jobs created by the Tourism Group are demonstrative of the effectiveness of community action, and could have influenced resident collective efficacy.

Volunteering and participation are key components of social capital (Putnam, 2001). For most related survey items, there were no statistically significant differences between the communities. However, Dorytown reported 59 more aggregate hours of volunteering per month than Bigcove. The difference is arguably a substantial one for these small towns and is also counterintuitive, considering that in Bigcove, at least five fire department volunteers per week contributed to fundraising activities.

Associational indicators of volunteering and engagement revealed that although the two communities contained the same number of organizations, it appeared that Bigcove had a higher proportion of volunteer association members (the fire department had a great number of volunteer members). Although number of volunteer organizations and membership offer some information on volunteer activity, as suggested by Schuller, Baron and Field (2000), they are insufficient to characterize bridging and linking networks (Woolcock, 2000, 2001), and engagement and solidarity/belonging aspects of social capital as described by Putnam (2000).

As stated in Chapter 6, survey participants in Dorytown indicated greater involvement in decision-making processes than Bigcove participants, a concept that has not yet been proposed as a social capital survey measure. Interview transcripts also revealed that

Tourism Group volunteers made decisions by consensus and valued their democratic practices. This may have contributed to the long-standing commitment of Tourism Group members. The ability to influence decision-making through democratic practices could promote empowerment and encourage civic engagement, a notion that is central to Putnam's conceptualization of social capital (Putnam, 1995, 2001). Other fields of research have often used voter turnout as an indicator of civic engagement (Putnam, 1995). Future research should consider the inclusion of ability to influence decision-making as a predictor of engagement. These concepts can be useful future social capital theory and research.

As an indicator of social capital, participation was observed in both communities and it was found that Dorytown events engaged all types of community members were held more frequently and received broader participation compared to Bigcove. However, Bigcove did have social activities that assembled residents, where participants benefited from camaraderie and social support (e.g. fire department meetings and the United Church Women's group).

With regards to community volunteering in Dorytown, the most active groups were

Tourism Group and the Recreation Committee. As for types of organizations, Dorytown had a very active recreation committee whose primary goal was gathering the residents.

The Tourism group's mandate was of course, tourism development. Nevertheless, they were also successful in engaging most residents as community volunteers during the annual festival fundraising event for the tourism group. Comparatively, Bigcove Fire

Department and United Church Women's group activities received substantial volunteer

support. However, Bigcove was experiencing substantial challenges with recruiting volunteers for recreational activities.

8.4.2 Conceptualizing Social Capital

In general, the social capital findings of this study emphasized its productive nature, in that it made possible the achievement of certain ends that would not otherwise be possible (Coleman, 1986). The study also revealed the presence of Putnam's (2000) four elements of social capital:

- Networks: Social networks (formal and informal) were present in both communities.
- Civic engagement: participation to sustain the networks. It was certainly evident that participation was critical for the productivity of social capital that was present in both communities. Though social capital studies typically examine voter turnout rates as a proxy for the measurement of civic engagement, resident involvement in decision-making can serve as an indicator, as mentioned above.
- Civic identity: This concept included sense of belonging, solidarity and equality.
 Though both communities expressed a sense of belonging, qualitative findings revealed that solidarity may have been eroding in Bigcove. It was found to influence the extent to which residents volunteer and engage with each other.
- Norms of cooperation and trust. All methods revealed that trust was high in
 Dorytown, but perhaps not as high in Bigcove, where residents did not feel quite
 as safe, and felt threatened by the crime in their town.

The differences expressed in Putnam's four components of social capital are useful for summarizing the differences between the two communities. However, in terms of the productivity of social capital for community development or LED, the nature (bridging, linking, and bonding) and activities of the networks need to be considered in more detail.

Dorytown demonstrated a greater number of networks with people outside the community who had similar characteristics (bridging) (Putnam, 2000; Woolcock, 2000, 2004). For example, the tourism group formed networks with tourism groups from other communities, tourism associations, chambers of commerce and post-secondary education boards. The town council works in cooperation with neighbouring town councils. These networks brought benefit to the individuals and groups both within the community and outside of it, as with the tourism certification project, making them consistent with Putnam's conceptualization of bridging social capital (Putnam, 2000).

Interviews also suggested that Dorytown's tourism group demonstrated greater linking social capital. That is, they created relationships with people in positions of power that facilitated access to resources (Woolcock, 2000, 2001, 2004), such as the government funding agencies and the regional tourism association. The distinction between the three types of social capital made by Woolcock (2000, 2001) is an important one, particularly when studying outcomes of social capital as they relate to LED, as is noted in the following chapter.

Another consideration for social capital theory is that collective efficacy, or a belief in the community's ability to meet challenges (considered previously as an indicator of social capital) and community confidence, or an optimism about the future of the community

(considered previously as a pre-cursor to social capital) (Perkins & Long, 2002) are similar beliefs that are generally absent from Putnam's (1995, 2000; 2004) conceptualizations of social capital. These concepts appeared integral to generating the types of activity and cooperation from residents that lead to community development activities in Dorytown. Both the survey and interviews support this observation.

Tourism Group members frequently expressed the importance they accorded to the community buy-in, or belief in the strategy. Intuitively, it makes sense that prior to volunteering for community development projects, one might believe it can succeed and be optimistic about it.

8.4.3 Social Capital Infrastructure

In the late 1990s, volunteers in Dorytown worked with funds from small project grants to save an old school building, transforming it into a recreation centre which includes a meeting space for the tourism group, the youth games room, Sunday school and activities organized by the recreation committee. This meeting space was an important facilitator of bonding social capital for the community. The presence of supportive infrastructure for social gatherings in Dorytown and the willingness of residents to maintain it appeared to facilitate social capital processes in this community. Community gathering spaces may be an important factor in supporting and enabling collective engagement, and could be further studied in future social capital research.

8.4.4 Dynamic Nature of Social Capital

According to Halpern (2005), social capital is capable of re-generating itself. This appeared to be the case for Dorytown; volunteers with the various committees encouraged residents to participate in social activities, but also to volunteer skills and

labour for large events such as the festival, which successfully brought residents together, re-enforcing feelings of pride in the community and their social capital. The interviews also revealed that social capital can be developed. Dorytown leaders recalled experiencing lack of togetherness and general despair at its lowest point during the '90s. It wasn't until leaders called for action that residents mobilized, showcasing the dynamic nature of social capital.

8.4.5 Leadership and Social Capital

Though the role of leadership in achieving LED outcomes will be discussed in more detail in the following chapter, leadership also revealed itself to be important for bonding social capital in general. For example, the leaders of Dorytown town council organized the annual Christmas seniors' party. Recreation Committee leaders were particularly instrumental in obtaining funding to build a recreation centre. They also led the committees in the organization of events such as dances, bingo and other activities. The leaders on each committee mobilize their members to plan and volunteer for activities. In effect, Purdue (2001) suggested that community leaders played a crucial role in accumulating internal social capital but were also at the forefront in accruing external social capital through partnerships with outside groups. He concluded that community leaders can act as key points of contact between governmental regeneration initiatives and local residents in neighbourhoods. The effective development of that type of leadership role requires the accumulation of two types of social capital (internal communal and external collaborative). This would imply that while they support bonding social capital, they play a special role in the creation and accumulation of

bridging and linking social capital. The findings of this study support the conclusion, as will be further discussed in the following chapter.

8.4.6 Human Capital and Social Capital

There were many examples of instances where residents' skills were critical for providing community services, meeting spaces, funding for community development projects, etc.

The results of this study strongly suggest that skills and knowledge are important resources that enhance the effect of social capital volunteering and participation.

8.4.7 Utility of the Methods Used to Explore Social Capital

The concept of social capital has been defined to encompass many components such as trust, networks, norms and participation. All methods used in this research project contributed to build an understanding of social capital in the two communities. The questionnaire measurements focussed more heavily on in-community networks (bonding social capital) as well as the characteristics of social capital described by Putnam (participation, norms, trust in neighbours) and individual measures of social capital suggested in community psychology literature (Perkins and Long, 2001; Long and Perkins, 2007) such as feelings about the community. The survey measures were not constructed to obtain information on networks with people, groups or resources outside the community. The interviews and observations provided information on the extent and nature of participation, types of activities and goals of the activities, which served to qualify participation data obtained through associational activity indicators and questionnaire participation measures. The interviews also provided information on the quality of networks, supports accessed through networks and productivity of networks between community groups and with others outside the community. In summary, the

methods complemented one another as they examined slightly different aspects of social capital. However, future survey research on social capital could further explore the nature of social capital networks and activities produced by them.

Community Updates: Bigcove and Dorytown

Bigcove

In speaking with residents in the area in 2009, it appeared that until then, very little had changed in this community. In the fall of 2010 however, a powerful hurricane caused some infrastructure damage to the area. The fish processing plant sustained damages, but was expected to undergo repairs for the 2011-processing season. However, in March, 2011, the Telegram newspaper reported that the damages proved too costly (over \$10M), and the plant would not open for the year, displacing 180 employees in the area.

According to the article, employment opportunities for the displaced workers were going to be explored (in association with the additional work scheduled to be undertaken by other fish processing plants).

In October of 2010, Bigcove amalgamated itself with the neighbouring towns to form a larger municipality. According to a regional government-funding agent interviewed in Winter 2011, new volunteer residents expressed interest in developing a visitor site for unique geological formations in the area and were working on a proposal.

Dorytown

In the summer of 2009, the Tourism Group employee provided an update for this research project. Tourism visitation statistics continued to increase since the fieldwork

was conducted, with 3342 visitors in 2006, 7516 visitors in 2007, and 9840 visitors in 2008.

The two B&Bs continued to exist and local entrepreneurship had continued to develop. There was a cabin rental operated by a local couple as well, who were planning to expand to rent a second cabin in 2010. The Orange Lodge heritage building was occupied by a locally owned and operated restaurant that employed three people. There was a seasonal take-out business in the municipal park on the beach operated by a woman from a neighbouring town. The historical (merchant) building was restored and completed and housed the Visitors Information Centre, employing eight tour guides during the summer. It also contained a local museum of Newfoundland Fishing History showcasing photographs from a local journalist taken over the course of his career. Finally, the historical merchant building had become the local craft and gift shop, where locals sold their quilts, paintings, etc. The annual Bird Island Festival continued to thrive, but the Tourism Group has added a fall festival fundraiser that links into their subsistence theme in celebration of the harvest. For 2009, the fall festival showcased several nationally recognized Newfoundland artists, along with a celebrated local chef to provide cooking demonstrations and meals prepared with the harvested vegetables.

In the spring of 2009, the Tourism Group learned that one of their major proposals to ACOA was accepted. Funding was announced to expand the local municipal park facilities in order to accommodate increases in tourism traffic in the area. The project expanded the park's kitchen and install public washroom facilities. This project employed 15 residents who worked enough hours to qualify for Employment Insurance afterwards. The Tourism Group has also received funding on a proposal to establish a

Puffin Information Centre, were visitors could take part in picnics as they learn more about the puffins and other birds they can observe from the shore.

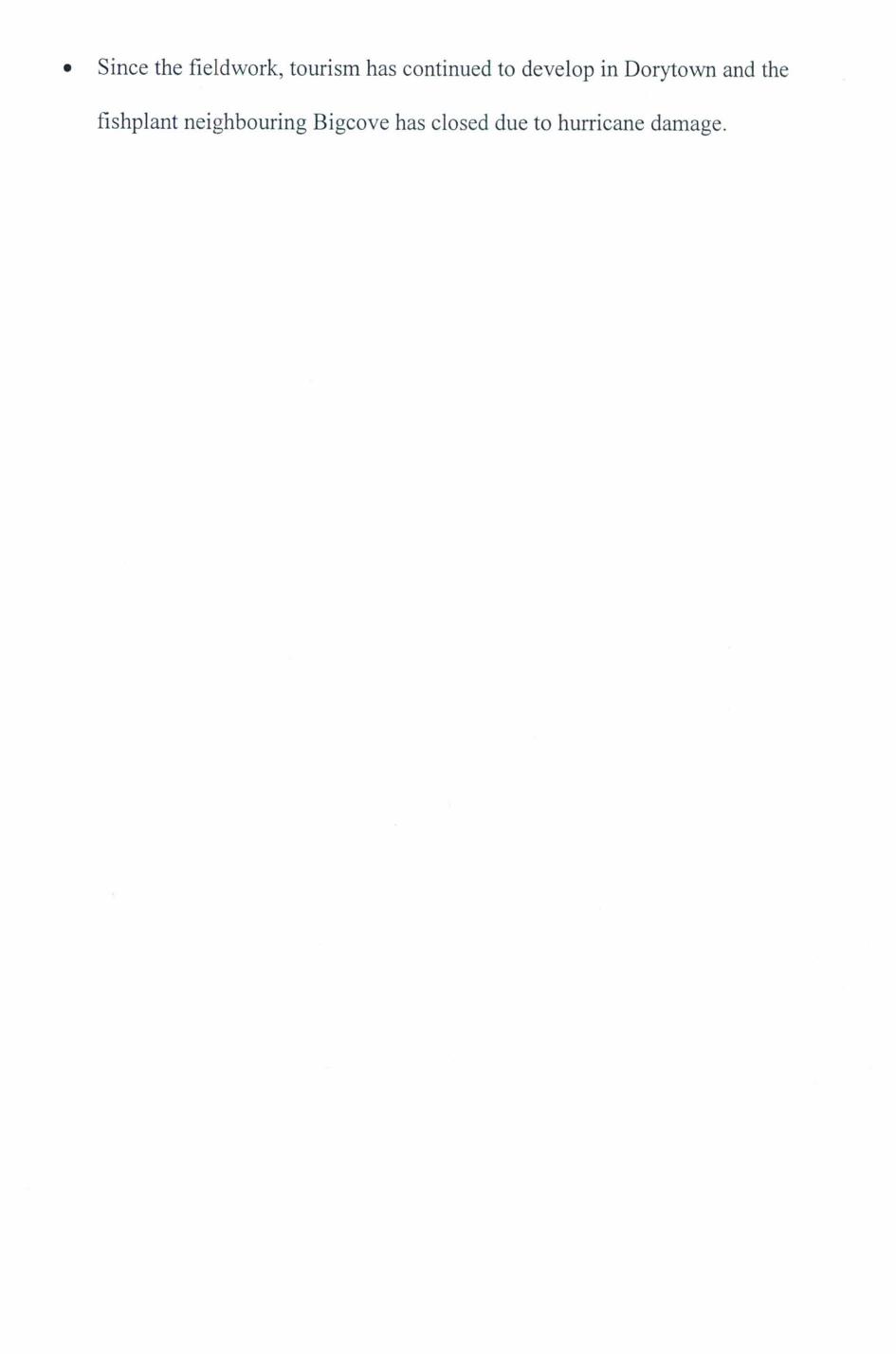
Since the fieldwork, the Tourism Group continued to develop major funding proposals to ACOA. However, the full-time staff person who managed proposal development obtained a teaching job at the neighbouring college. According to a Tourism Group representative, they were not able to replace her with someone could manage proposals to the same extent and as a result, much fewer proposals have been developed, leading to less seasonal project employment but also the inability to fund a full-time position for the Tourism Group.

A hurricane that caused extensive damage to other communities and some roads in the region in September 2010 caused the Fall festival to be cancelled that year. Tourism activities are expected to resume in the summer of 2011.

Overview of Chapter 8

- The survey questionnaire contained several items proposed to measure social capital within the community. All questionnaire items were related to feelings about the community, behaviours and participation, and bonding social capital or networks within the community as opposed to outside it. The two communities did not differ in items relating to their sense of belonging, or feelings toward their neighbours. However, they differed in terms of collective efficacy, and ability to solve problems and get along.
- Questionnaire responses also did not show significant differences between the communities in willingness to volunteer. However, a comparison of total number

- of hours volunteered revealed that substantially more hours per month were volunteered in Dorytown.
- Putnam's (2000) conceptualization of social capital was useful for describing salient characteristics of social capital in both communities. However, the qualitative methods revealed important differences in bonding, bridging and linking social capital between the communities.
- In terms of bonding social capital, participatory fieldwork revealed that both communities exhibited some bonding social capital, or supportive networks within the community. However, social events in Dorytown appeared to be more inclusive and residents were more willing to volunteer than in Bigcove.
- With respect to bridging social capital, Dorytown was characterized by greater cooperative networks with other communities than Bigcove, particularly in the area of service provision and tourism development.
- Finally in terms of linking social capital, leaders of Dorytown formed a larger number of networks with external organizations able to provide access to resources such as information and funding in order to develop community projects. Dorytown leaders also successfully developed positive working relationships with these funding agents while Bigcove experienced difficulty in working on funding applications.
- Resident perception of involvement in decision-making could be useful in future studies of social capital.
- The productivity of social capital in Dorytown was largely influenced by leadership, skills and abilities of volunteers.



Chapter 9: Summary and Discussion

The broad aim of this thesis was to carry out a detailed study of two communities that were both affected by the cod moratorium and faced similar challenges at the outset but were different in terms of economic success as determined by employment resilience over the following decade. As such, it builds on and extends the literature on the effect of fishery crises on coastal communities. In-depth case studies blending qualitative (ethnography, interviews, focus groups) and quantitative methods (survey data, government statistics) were used to gain a better understanding of broad dimensions of community well-being as well as the processes underlying it in them in the two communities.

Based on health-related, economic and sociological/political research, a theoretical model of community resilience was constructed (see Figure 3.1) to explore the role of social and economic processes in community well-being. The model reflected the reciprocal relationships between dimensions of community well-being, and the social and economic processes that can take place at the community level. Three main research questions were generated from the model.

The present chapter summarizes and discusses the research findings as they relate to the conceptual model constructed and the three main research questions that stemmed from it.

9.1 How are they Doing Over a Decade Later? A Profile of Community Wellbeing

Findings relating to community well-being were presented in Chapter 6. The following is a discussion of the particular contribution to knowledge about community well-being in general, and in the two towns that experienced the economic shock such of the cod moratorium.

Popularly studied indicators of community decline showed that both communities experienced substantial out-migration and as of 2006, and the age distribution was similar in both communities. In the 1990s Dorytown lost a greater proportion of residents than Bigcove, but when including population changes between 2000 and 2006, Bigcove lost a greater overall proportion of residents. Resident accounts suggested that people in Dorytown had been leaving in important numbers before the early 1990s, whereas this had been happening to a lesser extent in Bigcove. The greater population loss in Bigcove in the late 1990s and early 2000s may have been experienced more profoundly in that community.

In spite of the partial economic recovery of Bigcove in the 1990s, key indicators of economic well-being (percentage of the labour force reporting employment income, household income) were relatively similar for both communities as of 2006. Reports of employment income were similar for the province of NL as for Bigcove and Dorytown, but median income appeared substantially higher for the province of NL. Surveys and resident accounts contributed to this knowledge by providing an indication of residents' perception of the employment and income situation. Both communities reported their incomes to be sufficient. However, a slightly greater proportion of Bigcove residents

reported just getting by with their income, which was interesting considering the median income for all family types was similar for both communities, according to tax filer data. Over the decade leading up to the fieldwork period, Bigcove had experienced an overall increase in seasonal work while Dorytown had not. Paradoxically, Dorytown residents perceived more employment opportunities in the region and had a more optimistic view of the economic future of their community.

During interviews and informal conversations residents of both communities reported concerns with employment the security or sustainability of jobs. This example illustrates how along with the statistical data, resident perceptions of income and employment sufficiency are important in understanding the manner in which they may or may not be affecting residents' physical and psychological well-being. Such questions are important to include inwell-being questionnaires..

In terms of individual well-being indicators, both communities reported higher smoking rates and moderate alcohol drinking when compared to available provincial statistics, but reported better self-rated health, less life stress and less heavy drinking. The two communities also had lower all-cause hospitalization rates, but greater respiratory and circulatory cause-related hospitalizations. These findings were consistent with other studies that examined individual health indicators in communities impacted by the cod fishery closure (Murray et al., 2007; Ommer, 2007). There was a tendency for Dorytown to demonstrate slightly better health outcomes than Bigcove for most health indicators, including cause-specific hospitalizations. Significantly more Bigcove residents reported moderate and heavy alcohol consumption than Dorytown resident. Though the finding is consistent with findings linking insufficient employment to alcohol abuse

(Hammarstrom, 1994; Khlat, Sermet & Le Pape, 2004; Montgomery et al., 1998),
Dorytown, with similar employment rates, had less heavy drinking than the provincial
rate, suggesting, highlighting the complexity of influences behind alcohol abuse. Other
research has proposed that social support can act as a buffer between unemployment and
unhealthy behaviours (Brown & Harris, 1978), as discussed in a later section.

Less commonly studied indicators of community well-being such as satisfaction with services and the built and natural environments, and involvement in decision-making contributed useful contextual knowledge about quality of life in those towns. Declining populations influence town revenues, which can impact services. In effect, Dorytown residents reported greater satisfaction with services and involvement in decision-making processes than Bigcove residents. Additional interviews and ethnographic data on community processes suggested that the town council of Dorytown was able to draw upon its own skill sets and networks with other communities to facilitate the provision of services. As suggested by Frohlich et al., (2006) in a discussion of health promoting community characteristics, environments such as greenery and parks encourage residents to be active outdoors and value their community, and good support services for residents are health enablers.

Contrary to crime statistics obtained from the RCMP, survey ratings of crime statistically significantly greater in Bigcove than in Dorytown. The finding was further substantiated by resident interviews and other qualitative data, where residents reported concerns about vandalism and drugs in the community. Other research has linked community economic decline with crime (MacIntyre et al., 1993; Sooman & MacIntyre, 1995). According to Ommer (2007), young people in the declining coastal Newfoundland communities she

studied engaged in behaviours such as drug abuse and alcohol consumption often at young ages and sometimes in combination with other activities such as swimming or driving. These activities were described as rites of passage to adulthood by young people in a "matter of fact" manner. Youth did not express great fear or concern about engaging in these risky activities, suggesting that certain norms may have existed in their community. Conversely, Bigcove residents in this study expressed serious concerns about the use of "harder" drugs and vandalism, and appeared quite worried about the drugs and suspected associated theft/vandalism activities. The findings related to crime in this study illustrate the benefits of a mixed methods approach for studying community well-being.

New models of community well-being and ways to measure it continue to emerge from the literature (Sirgy, Widgery, Lee & Yu, 2010). Consistent with the findings of this research project, the recent Sirgy et al. (2010) model also recognizes that in order to understand well-being, it is important to develop an understanding of resident satisfaction with certain domains within it (e.g. family, social, leisure, health, financial, cultural, consumer, work, spiritual and environmental). The research findings presented here suggested that for any given community, some dimensions of community well-being may be more important than others, as suggested by Labonté et al. (2000). This supports the use of qualitative methods such as interviews along with survey data to uncover the true nature of well-being at the community level.

9.2 How Have Community-level Processes Affected Community Well-being?

This section discusses the community-level processes observed that underlie the community well-being findings presented. In most cases, social and economic processes

were interwoven. Therefore, they can most effectively be discussed together as context for community well-being in the two communities.

9.2.1 Resilience Processes: LED and Social Capital

As reported in Chapter 7, two types of LED were observed. For Dorytown, the process was described as a tourism development strategy that was managed by community members but used funding from government sources outside the community. Bigcove benefited from the re-opening of a nearby fish plant to process shellfish with external control of natural, physical, and financial resources as well as external project management.

Similarities in LED indicators included employment rates, perceived security of employment and nature of employment (more seasonal than year-round). Dorytown appeared to be more economically diversified than Bigcove and less dependent on the fishery. An examination of patterns of travel to work for both towns revealed that most residents commute outside the community for work. The example of employment recovery in Bigcove, where jobs are located in the neighbouring community also highlights the importance of the regional economic dynamic for creating employment opportunities for residents. Interestingly, in the early 2000s, there was an increase in full-time, full year employment in Bigcove, an employment category that was dominated by women. This supports previous research suggesting that the burden and workload of women has increased in such communities as they take on more work hours along with their household responsibilities (MacDonald, Neis & Murray, 2008).

As reported in Chapter 6, social capital findings suggested that Dorytown exhibited greater collective efficacy (belief in the effectiveness of organized action) and community confidence was recorded through the survey as well as interviews and observation. These cognitions are suggested predictors of social capital behaviours. Dorytown was found to have experienced greater bonding social capital (volunteering, participation, dense and supportive networks within the community), bridging social capital (productive networks with similar groups outside the community) and linking social capital (networks with organizations that provide supports and resources).

9.2.2 Resilience Processes and Community Well-being

LED, Social Capital and Health

Employment is a well-established health determinant (Jahoda, 1982; Ross, 2004). Both communities experienced a substantial loss of jobs (and related out-migration) in the early 1990s, followed by some increases in employment rates. Employment outcomes were similar in both communities and a high proportion of labour-force aged residents were reporting employment income in both communities in 2006.

In the few years leading up to 2006, Bigcove appeared to be benefiting from greater full-time/year round employment than Dorytown, where seasonal employment appeared to be on the rise.

Possible health benefits of jobs created include positively self-rated health (Svedberg et al., 2006) and decreased psychological distress (Gien, 2000; Paul & Moser, 2009).

However, the study found that some residents in both communities expressed concerns with the security of their jobs. Scholars have linked job insecurity to prolonged strain

(Lazarus & Folkman, 1984) and psychological (Sverke, Hellgren & Naswall, 2002) and physiological changes that can lead to increased use of medical care (Bartley et al., 1999). Social supports (characteristic of bonding social capital) can decrease the likelihood of stress-related illnesses (Baum, 2002).

LED, Social Capital and Crime/Safety

The increased criminal activity (vandalism and drug use) were reported in interviews and through the questionnaire for Bigcove. As previously suggested, crime has been linked to community economic decline (MacIntyre et al., 1993; Ommer, 2007; Sooman and MacIntyre, 1995). In spite of their relative employment recovery during the 1990s, residents of Bigcove stated they were more afraid of walking alone in their community, a popular physical activity in many rural communities. The findings suggested that crime might be acting as a deterrent to that activity. As detailed in the following paragraph, the analysis of social processes was more useful in understanding differences in crime and safety between the two communities.

Some studies have suggested aspects of social capital to protect againstcrime (Saegert, Winkell & Swartz, 2002; Sampson et al., 1997; OECD, 2001). In Dorytown, young people were encouraged to gather and make use of volunteered resources in the community centre. Also, volunteers have often initiated projects whereby young people and youth at risk of becoming involved with the justice system can participate in community development activities such as town beautification projects, and other projects that contribute to the tourism strategy.

The social control theory (Hirschi, 1969) explains criminal or delinquent behaviour through a lack of positive stimuli or relationships with positive people or conventional institutions. It appeared that youth in Dorytown had positive relationships with role-models enabling them to work on, and take pride in, town beautification. The presence of role-models and engaging youth activities was less evident for Bigcove. Crime findings for Bigcove also appear to be consistent with Agnew's (1999) development of the general strain theory for communities of high unemployment, whereby increased exposure to negative stimuli such as vandalized public property, and parks that have to be protected by a chain-link fence may cause youth to devalue their own community and more easily commit acts of vandalism.

LED, Social Capital and Health Behaviours

Research has suggested that alcohol abuse is a coping response for unemployment or underemployment (including job insecurity) (Hammarstrom, 1994; Khlat, Sermet & Le Pape, 2004; Montgomery et al., 1998). Employment statistics for the two communities were comparable in 2006. However, residents of Bigcove, who reported greater moderate and heavy alcohol abuse, also perceived less employment opportunities in the region. Future community well-being research should consider perceptions of employment stability and availability along with employment statistics.

The role of social support in preventing alcohol abuse should also be considered in future research on the impacts of economic decline. Hammarstrom's (1994) and Kawachi (1999) suggest that social support and possibility of control as potential protective factors against alcohol abuse. In effect, Dorytown bonding social capital findings suggest greater closeness among community members, or stronger social support networks.

LED, Social Capital, Control and Well-being

Residents of Dorytown reported greater ability to influence decisions, greater ability to find employment and a positive outlook for the future of their community. These cognitions reflect a greater sense of control over the situation, which can help residents cope in a time of uncertainty, and could partly explain the differences in alcohol and drug consumption between the communities, in spite of similarities in actual economic outcomes (i.e. employment rates). In effect, several reviews document that during stressful life circumstances, sense of control over a situation can lead to active, problem-focussed coping strategies, reducing psychological disturbance and physical illness (Lazarus & Folkman, 1984; Thoit, 1995; Turner & Roszell, 1994). The interviews and ethnography findings suggested the possibility that the LED processes that Dorytown leaders and residents engaged in collectively, the manner in which they were undertaken, which involved social capital processes (substantial volunteering, committees that proceed by consensus, civic engagement), and resulting creation of seasonal jobs has contributed to those perceptions and cognitions.

Social Capital and Gathering Spaces for Community Well-being

This study also revealed interesting findings in terms of the influence of other types of social capital on community well-being outcomes. For example, in Dorytown, leadership and linking social capital have provided the community with a meeting space that responds to many of their community needs, such as tourism group meetings, social events, Sunday school and physical activity for youth. These spaces are important for community well-being.

Bridging Social Capital and Quality of Services

The interview findings suggested that Dorytown was able to access volunteer labour and equipment through its networks with other communities. The resources have facilitated the offering of basic services (e.g., water, fire department) to its residents.

9.3 What is the Nature of the Relationship between Social Capital and LED?

The research findings suggested a relationship between social capital and LED in Dorytown, where economic opportunities were developed by community members. The following is a discussion of findings that suggested relationships between the two concepts.

9.3.1 Does Social Capital Support LED?

The interview data suggested that all three types of social capital played a role in the success of the LED initiatives of Dorytown. Dense, cohesive networks, participation and volunteering (i.e. bonding social capital) were found within the various community groups. The democratic decision-making processes by which Dorytown's Tourism Group functioned were cited as one of the reasons for the continued commitment of its volunteer members. As demonstrated in the Onyx and Osburn (2005) community development study, a lack of democratic processes and power struggles can cause people to withdraw from groups and projects can lose momentum as a result.

Bonding social capital was also evident in the extent of resident volunteering toward tourism events such as the annual festival, a major fundraiser for the Tourism Group. Dorytown was found to exhibit greater collective efficacy (belief in the effectiveness of organized action) and community confidence as recorded through the survey as well as interviews and observation. Flora et al., (1997) contend that these attitudes are an

important for achieving LED success. Though bonding social capital and volunteering existed in Bigcove and were beneficial to community residents, these activities were not directed at developing economic opportunities.

Networks with similar others outside the community such as regional associations and tourism committees (i.e. bridging social capital) was evident in the development of tourism certification for people of the area. These types of cooperative networks of businesses within a given industry have been previously suggested as important for rural local and regional economic development success (Dawe, 2004). Also, networks between town councils enabled Dorytown to provide services at a reduced cost, freeing up money for small projects that support tourism and for which they must contribute proportion of the funds.

Finally, linking social capital (networks with individuals who provide access to resources) was found to be critical to the development of tourism-related LED. The importance of the relationship between the funding agencies and the Tourism Group was acknowledged by key informants from both parties. One funding representative plainly stated that the ability for the Tourism Group members to network and become well known in the region greatly influenced their capacity to understand the regional mandate of the funding agencies, and develop successful funding proposals. The finding is consistent with Woolcock's (2000) claims that disadvantaged communities need to link with people who can provide access to resources for development.

9.3.2 Does LED Support the Development of Social Capital?

Research has suggested that individuals who are preoccupied with finding employment to meet their family's basic needs often do not have the time to engage in volunteer activities (Fowler, 2008). As seen above, both communities had similar employment rates. However, the nature of the volunteer leaders' financial situation deserves further consideration. In Dorytown, volunteers of the Tourism Committee were employed by the nearby College, local retail stores, and some were retired. Similarly, in Bigcove, many informants who volunteered with the local council or had previously volunteered on committees were also employed in fish processing or harvesting.

In the case study of Dorytown, LED processes involved networking within and outside communities, the LED activities of Dorytown resulted from the mobilization of resources (human and financial) through social capital. For example, many volunteers worked to make the annual tourism fundraising event a success, thus utilizing social capital. However, the event also acted to bring the community together, which further re-enforced the networks. This demonstrates the regenerative potential of social capital and the dynamic nature of communities (Kulig, 2000).

9.4 Leadership and Human Capital as Critical for Community-Based LED.

It would seem that leadership mobilized social capital which contributed to the development of the tourism strategy, as suggested by the interview and ethnographic transcript analysis. According to interviews and observation, volunteer leaders who were members of the various committees mobilized community participation for bonding social capital. For example, tourism and recreation committees and the town council

organized the annual tourism festival. The findings also suggested that tourism and town council leaders formed the bridging social capital networks with neighbouring communities that contributed to tourism development and community services. Finally, Tourism Group leaders (two in particular) were primarily responsible for networking with funding organizations and others that provide resources such as a regional tourism association and the provincial college. Though the importance of leadership has been underplayed in social capital theory, it has been mentioned in other resilience models (Kulig, 2000).

Human capital is the stock of expertise accumulated by a worker – knowing how to do something. There is some debate as to whether the definition should include knowledge and abilities independently of their income-earning potential (Halpern, 2005).

An MBA program in CED was developed at the Cape Breton University, based on the experience of CED practitioners and researchers associated with the New Dawn Enterprise cooperative movement. MacIntyre and Lotz (2006) outline skills in that curriculum that are seen as core skills of CED, including hard skills (e.g., principles of accounting, marketing, finance, venture analysis, organizational behaviour, etc.) and soft skills (e.g., history and theory of community development, community organization, leadership training). Most of these skill sets were active in the CED efforts of Dorytown, and were particularly important for creating successful funding proposals and managing projects.

According to interview findings, human capital was also mobilized through bridging and bonding social capital. In the case of bridging social capital, the community volunteers

contributed their business skills toward the development of tourism certification while for bonding social capital, residents who are skilled in baking and arts and crafts donate prizes for the festival. In this case, the existence of the skills and education would not have been sufficient to achieve CED objectives. The willingness of residents to volunteer these skills to the tourism group and related activities was critical.

The OECD (2001), in their discussion of social capital's influence on mobilizing skills and abilities, also stress that the formation of social capital seems to be related to education, skills and abilities of those involved in the social interactions. It appeared that key volunteers and leaders involved with the Tourism Group of Dorytown had obtained post-secondary degrees and were working professionals or retired professionals (e.g., professional photographer, journalist, teacher). In contrast, leaders of Bigcove had fishery-related careers and the skills put to use in such work may be quite different, and less transferable to activities such as developing funding proposals and managing development groups, etc.

Human capital (skills and abilities) has also been cited among key resources or assets such as economic capital, social capital and natural resources for building community capacity for development (Reimer, 2006).

9.5 The Experience of Bigcove and Dorytown and Definitions of Resilience

Generally speaking, how did these communities measure up to definitions of community resilience? Resilience as defined by Mangham (1997) is the capability of individuals and systems (e.g., families, groups, and communities) to cope successfully in the face of significant adversity or risk. It would appear that Dorytown is coping comparatively

better in this regard in terms of residents hope for the future and community inclusiveness or togetherness and developing some opportunities for residents. The findings of this research project suggest that resilience may involve action beyond "coping", as defined by Mangham (1997).

The experience of Dorytown also resonated with Kulig's (2000) definition of community resilience, emphasizing the ability of a community to not only respond to adversity, but in so doing reach a higher level of functioning. Leaders described a mobilization of effort and transformation that enabled the community to accomplish things that they would not have in previous decades. Not only did they cope, but they actively responded.

Adger (2000) points to the importance of ecosystem resilience after a shock for the sustainability of resilience in other forms. In the case of these two communities, a return of the fish stocks might offer a more promising future with increased employment opportunities. Residents could return to the communities, if they so desired. Current models of ocean resource management have not yet proven their ability to support a sustainable, renewable fishery. This knowledge will fuel concerns about the economic future in Bigcove, where residents continue to depend on the fishery.

As reviewed in Chapter 2, Norris and Norris (2008) defined community resilience as a process linking a set of networked adaptive capacities or resources to a positive trajectory of functioning and adaptation in constituent populations after a disturbance. The authors highlighted the importance of various types of resources for development. The findings for Dorytown highlighted the importance of resources (human skills, social capital, financial resources, natural resources – in the form of natural touristic attractions) that

were drawn upon for the community development initiatives. The information and communications resources suggested in the Norris and Norris (2008) model were not seen to play a relevant role for the communities. In the initial model presented in Chapter 3, social capital was positioned uniquely as a process. However, given its dynamic nature, as previously described, it can also be seen as a valuable resource.

Resilience and Community Well-being

Based on the observed community-level phenomena described in this report, a definition of resilience should consider the actions undertaken by a community (including mobilization of resources) in response to an adverse event that contribute to greater community well-being. The observed social and economic processes initiated in Dorytown (e.g. engagement of youth and other residents) could have positive repercussions for certain community well-being dimensions (e.g. positive outlook for the future, community pride, absence of vandalism and feeling of safety). Community resilience can therefore be defined as a process whereby communities utilize their social and economic capacities/resources to adapt or respond to a crisis for improved well-being.

9.6 Context

Although the purpose of the study was to examine the mediating effect of resilience processes (e.g. social capital, LED) on the relationship between economic crisis and community well-being, the discussion of results must also consider the dynamic nature of these processes and the environmental, historical, cultural, political and economic context in which they occur. Any valid discussion of community development must include such contextual facilitators or constraints (Reimer, 2006). According to Reimer's (2006) NRE

study, in cases where contextual factors such as geographic isolation, exposure to global markets, lack of institutions (universities, services) and unstable economies are at play, communities are more likely to need social capital in order to achieve community development outcomes. This statement resonates with the context of many rural and isolated communities in Newfoundland and Labrador.

The following is a discussion of some other contextual factors that influence resilience processes and well-being following an economic crisis.

9.6.1 Environment

In the case of both communities under study, the environment has a direct and powerful influence over their ability to be resilient. An increase in fish stocks could revive fish harvesting as a viable economic activity in many coastal towns. However, without sound coastal resource management systems, it is less likely that revived harvesting efforts could be sustained.

9.6.2 History and Culture

As Alan Kay (2005) stipulated, history is crucial in understanding social capital, particularly at a community level. The level of social capital within a community is often understood within the historical and cultural context of that community, which sets the pattern of what is seen in that community to be 'normal'. As discussed in Chapters 5 and 8, certain historical influences such as the socio-economic divisions in Bigcove on the nature of social interactions within that community.

In his study of Italian regions, Putnam (1995) linked the rich social fabric of vibrant associational life he saw in northern Italy to the northern city-states of centuries earlier.

As proposed in Chapter 8, cultural norms such as neighbourly behaviours may be common to rural Newfoundland communities for much the same reasons.

9.6.3 Macro-level Political Context/Access to Financial Resources

Undeniably, the political context in which the community exists has had an important influence on its ability to develop economic opportunities. Without the availability of government CED programming or assistance, Dorytown would not have gained access to the financial resources necessary for their development initiatives. Commercial lending institutions are unlikely to invest in these types of initiatives, particularly in rural areas where the power to make decisions to fund business loans has been centralized to larger areas. Also, these community groups often do not possess the assets that commercial lending institutions require for loans. In brief, government funding support for community development meets a need that would otherwise not likely be met.

The government funding organizations were located relatively close to these communities, and are staffed by workers who are from these areas, which facilitated networking for the community groups as was shown to be the case for tourism development in Dorytown. Closeness (i.e. physical and social) of the state to the society over which it presides has been dubbed state-society synergy (Woolcock, 1998), and is also suggested to influence linking social capital in particular. Woolcock concludes that state-society synergy, combined with organizational integrity, described as institutional coherence, competence and capacity will determine the equality of access to resources through linking social capital for various groups.

That being said, as described in Chapter 7, project-based activities have yet to create sustainable (if seasonal) employment or entrepreneurship opportunities. With regard to the development of one of the province's largest resources, the ocean, scholars have suggested that governments have not facilitated any significant development of alternatives to cod fishing, or value-added diversification around the staple base in coastal Newfoundland (Ommer, 2007). Residents in Bigcove stated that there was a general absence of direction from government departments and given the lack of opportunity, people were leaving the community. Governments have an obligation to look after community interests when their action (such as the cod moratorium) results in significant restructuring. An important future direction is for governments to use their legislative authority to empower communities to undertake such developments

9.6.4 Economic Context

As mentioned in the literature review, in our era of trade liberalization and global economics, LED initiatives are always susceptible to influence. For example, if the price of gas were to increase due to supply issues in other countries, less people would be willing to travel, affecting the success of tourism in Dorytown. Comparatively, cheaper unskilled labour costs in other countries make it possible for fish processing companies to transport their product elsewhere for processing, affecting the viability of fish processing operations in Bigcove. For these reasons, economic context should be considered when studying regional or local economic development.

Also, as previously suggested, the regional economic dynamic can influence the development of opportunities for residents who can travel for employment. Therefore,

community development research should consider regional economic processes or realities.

9.6.5 Legal Authority

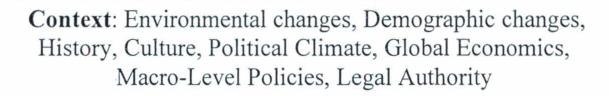
Community capacity is impacted by the powers that their local, regional and provincial governments have to legislate transportation structures and costs, taxation systems on businesses, monetary regulations, and stewardship over local natural resources, all of which can impact business success. In Canada, those powers exist at a Federal level, and much less at a Provincial level, which can make it difficult for local businesses to represent their interests in that regard (Greenwood & McCarthy, 2000). This is a particularly salient point for business development in Newfoundland and Labrador, which has been vulnerable to the effects of transportation costs (Savoie, 2001) and government stewardship of natural resources (Murray, Bavington & Neis, 2005). Several coastal regions in Newfoundland and Labrador are developing local stewardship models. While success has been reported in some regions (Fish, Food and Allied Workers, 2007), according to government officials that work closely to these local stewardship projects, other instances have not achieved the expected levels of success. As these relatively new local stewardship models grow in application, further research will likely be necessary to draw conclusions on their effectiveness and sustainability. A recent international study of success in stewardship models by Gutiérrez, Hilborn and Defeo (2011) suggested that leadership, the establishment of individual or community quotas, and social cohesion were the top common factors in successful co-management.

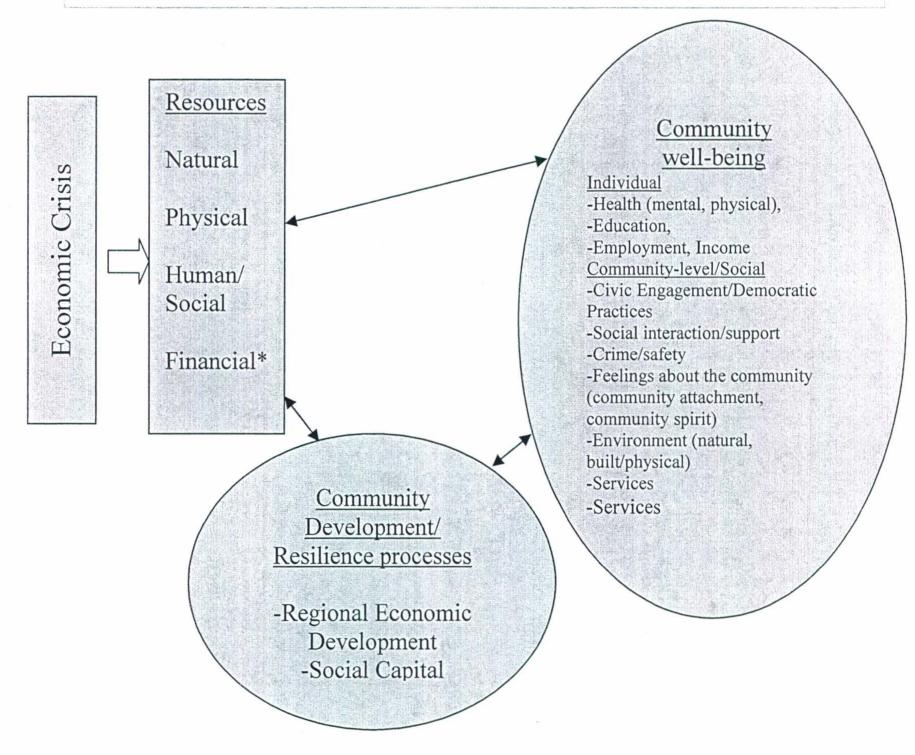
9.7 Theoretical Implications: Revised Model

The model proposed at the beginning of Chapter 3 was constructed based on the available literature on economic crisis, its impact on community well-being and the role of resilience processes such social capital and local economic development. The important contributions brought to light by this study are the other important factors, which have been added to the model.

Figure 9.1 represents a revised theoretical model of the social and economic resilience processes capable of influencing well-being outcomes for coastal rural communities impacted by an economic crisis.

As previously discussed, leadership is part of the human resources that acts as a catalyst for all types of social capital, which can harness the skills of volunteers (another type of human resource) toward the development of resilience activities (in this case, local economic development but also other community development projects). Other types of resources are also important for LED (natural resources, economic/financial resources or in-kind contributions) that can be applied toward a development project. Also, contextual influences such as legal authority and macro-political structures are represented as the model operates in a dynamic and ever changing environment.





^{*}Financial resources are thought of as a necessary part of combining and mobilizing other types of resources.

Figure 9.1 Rural resilience resources, processes and community well-being

In the Dorytown example of locally controlled LED, linking and bridging social capital facilitated project initiation which in turn, enabled access to greater resources necessary for project development. Without contextual factors such as government programming, history and culture, the LED would not have taken place. While it is not possible to conclude what would have happened in Dorytown without the tourism efforts, it is

possible that without them, more residents would have had to move away for employment, leaving those behind with less hope for the future of the community, less perceived employment security and a general devaluing of the community. Of course, as the model also illustrates, social processes like social capital can be directly linked to well-being in many other ways as suggested in the results of this study.

Finally, the model could be built upon through further research of communities that have adjusted through the development of LED strategies, and applied to help determine the areas of needed support for those communities who are newly faced with similar crises.

9.8 Methodological Implications: Strengths and Limitations

The study aimed to investigate community resilience processes since the economic crisis that would lead to better outcomes. Though findings of the community case-study approach cannot be generalized, the extensive fieldwork allowed for a better understanding of resilience or development processes that occur at the community level. Nevertheless, the study of processes was retrospective in nature and in many cases the researcher had to rely on residents' accounts of the period since the fishery decline for lack of external or impartial data sources. However, the participation of interviewees from within and outside the communities helped to balance the interview data. Measurements of community well-being were largely informed by residents' perceptions of well-being dimensions as indicated in the survey or interviews. To strengthen the findings, government data sources were used where possible.

Overall, the study found that these statistical data sources were well complimented by resident perception, which remained paramount as was it likely more closely tied to mental and physical well-being and decisions to leave a community or remain.

One of the major strengths of this research project is its use of multiple methods such as field work, interviews, and administrative data to triangulate the evidence. For example, economic resilience data needed to be reconciled with residents' experience in order to gain a more accurate perspective of LED. Also, crime results represent a case where reliance upon data alone would have produced an erroneous account of residents experience with vandalism and drug abuse. In the absence of the field work methodology, social capital findings would have likely been based on fewer interviews and the survey questionnaire alone, which would have failed to recognize the differences between bonding, bridging and linking social capital along with the qualities of community participation.

Another limitation of the case studies is that because they were cross-sectional and retrospective (studied a process that had happened in the past and associated outcomes at one point in time), causal inferences cannot be made from the findings. Studying the resilience processes as they were happening in a longitudinal manner would have lent more validity to the findings. However, considering that the resilience processes are ongoing, the feasibility of such a study may be questionable. Both communities and their well-being will undoubtedly continue to evolve. This project took place before true sustainable employment outcomes resulting from the tourism initiatives could be seen. Though residents and government partners are hopeful, it would be useful to re-examine

Dorytown10 years into the future. The most desirable outcome for well-being is sustainable employment.

9.9 Implications for Future Research

The findings of this study bring to light several questions that future research may address. Current questionnaire measures offered some indication of bonding social capital (volunteering, participation, some aspects of sense of community). However, given the findings with regards to linking and bridging social capital, attempts to study social capital in larger populations may focus on the development of survey instruments that collect information on bridging and linking networks that extend outside the community, the activities they engage in and their purposes. Qualitative methods were effective for characterizing the nature of all forms of social capital, and should continue to be used as a validation tool.

More longitudinal research on a sample of communities initiating resilience processes would assess the model's utility or add to it. The model could also be used in a community development intervention research project, whereby the resilience process could be facilitated according to the model suggested elements of importance. In doing so, the processes as well as the outcomes could be studied.

Future research should also undertake a more fulsome analysis of the regional economic dynamic and ask residents about employment prospects that may exist outside their community, region and province. Such questions could be followed by explicit questions about whether they believe they will have to move to find employment.

9.10 Implications for Policy

Communities lacking in the availability of skills and knowledge (human capital) towards LED projects could benefit from assistance in this area (particularly not-for-profit groups) for example, in the form of skills enhancement training to develop proposals, business planning, etc.

Given the findings of this project and on-going challenges faced by the manufacturing sector, which is resulting in loss of employment in rural Canada, there appears to be a need to promote entrepreneurship as a viable career option, and offer some business skills development training to meet apparent needs. Policies that support economic diversification of communities will also help mitigate risks associated single-industry economies.

The case of Dorytown illustrated the potential effects of government sponsored economic and employment development projects can have on communities. Communities and their leaders can use these initiatives to engage youth and other residents who might otherwise not be able to leave to find employment, allowing them to be productive contributors to their communities. These policies/programs promote well-being and help mitigate the impacts of economic shocks that are becoming more common in the era of economic globalization, and should continue to be supported.

Provided people's basic needs are met, a vibrant social life is an important part of wellbeing for any community. The findings of this project suggested that social capital could lead to positive well-being outcomes that are not necessarily related to employment creation. This finding implies that fostering engagement, participation, volunteering can bring added benefits to communities.

Overview of Chapter 9

- In terms of demographic and economic well-being findings, both communities sustained population declines and the towns had similar age composition in 2006. Income was lower than provincial levels and employment was similar to provincial levels. Income and employment outcomes appeared to be relatively similar for the two communities as of 2006. In general, residents of both communities described their towns positively. However, Bigcove residents reported declining closeness, less community safety and less involvement in decision-making, problems with drugs and vandalism, and were less optimistic about the future of the town. The two communities showed greater smoking, moderate alcohol drinking, circulatory hospitalization and cardiovascular hospitalization than provincial rates, but better self-rated health. Community well-being outcomes had a tendency to be better in Dorytown than in Bigcove, with the only statistically significant difference found in alcohol consumption.
- The multi-method community case study approach facilitated the discovery of several community well-being dimensions that would not otherwise have been possible such as youth engagement, crime and certain types of information on the social context.
- Social and economic processes were important for community development
 initiatives undertaken in Dorytown. These processes occurred together in
 Dorytown and appeared to be interdependent, supporting one-another. Attempts

- to understand them independently would compromise one's understanding of their potential impacts.
- The findings suggested that resources (financial, physical, human/social, natural/environmental) are integral to community resilience/development initiatives. Human/social resources that were of particular importance were leadership, and skills and social capital (bonding, bridging and linking).

 Contextual factors such as supportive government programming and legal jurisdiction, including local stewardship over resources.
- While job creation is likely the most desirable outcome for economic well-being, some degree of economic diversification and job sustainability should be considered as well. Beyond economic well-being, social engagement can foster community well-being outcomes through the provision of social supports and the benefits that can derive from it, along with other well-being outcomes of the activities undertaken.
- It is important to understand the regional economic context when considering local economic development. That is, employment opportunities in neighbouring communities can have as great an impact on a community's well-being if it generates employment for its residents.
- Communities are dynamic and processes in which they engage can influence their well-being, as well as the resources that will be at their disposal for future development activities.

 Some limitations of the study were the cross-sectional/retrospective nature of the data collection and absence of well-being data since the beginning of the 1990s that would have enabled an examination of trends.

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Appendixes

Appendix 3 – A Key Informant Interview and Focus Group Guide

Community History and Present

- 1. How would you describe the history of this community?
 - a. Its' economy (including fishery decline)
 - b. Its' people
 - c. Its' social practices
- 2. How would you describe the community now (economy, people, social practices)? And in terms of well-being?

Community Planning

- 3. What type of planning occurrs at the community level?
 - a. Do you feel that residents were involved in developing ideas for community development?
 - b. Describe one or two community development projects undertaken in this community.(planning process, approach to external funding agencies, etc.)
 - a. (If Applicable) Were there any community economic development projects initiated by the community? Could you describe the planning and the community's role?

Involvement of External Resource People (if applicable)

4. How did you become involved in economic development efforts in this community?

Partnerships and Volunteering

- 5. How would you describe the cooperation and collaboration between community members, government officials and other partners involved in the initiative?
- 6. Did this initiative require a lot of volunteer time from those involved?

Advantages and Challenges

- 7. What would you describe as the biggest obstacles or challenges to the initiative? (or to planning economic development initiatives in cases where there have been none)
- 8. What would you describe as the biggest asset to the initiative?

Future of the Community

9. What do you think the future of the community will be?

Appendix 3 – B: Community Health and Well Being Survey

De	emographics
1.	Please identify your age group by placing a checkmark in one of the boxes below:
	1 Under 20 years
	2 21 years - 30 years
	3 31 years - 40 years
	4 41 years – 50 years
	5 51 years – 60 years
	6 Over 60 years
2.	Please identify your gender by placing a checkmark in the appropriate box:
۷.	1 Female
	2 Male
	2 Male
3.	What is your current marital status? Are you
	1 Single (never married)
	2 Married
	3 Living with partner or common-law
	4 Widowed
	5 Separated
	6 Divorced
	o Bivorecu
4.	How many people currently live in your household?#
5.	How many are aged 12 to 17?#
6.	How many are aged under 12?#
7.	How many are aged over 65?#
Calc D	- 4 - 3 TY - 3/1
	ated Health In general, would you say your health is:
0.	In general, would you say your health is:
	1 Excellent
	2 Very Good
	3 Good
	4 Fair
	5 Poor
Comm	nunity Health
	In general, would you say that the well being of residents in your community is:
).	1 Excellent
	2 Very Good
	3 Good
	4 Fair
	5 Poor

Physical Health

Disability / Mobility

- 1. Are you now suffering from any disability, that is, a condition that stops you from doing your routine activities?
 - 1 Yes
 - 2 No

Disability / Mobility

- 2. If so, is your disability a long term condition, that is, a condition that has lasted or is expected to last 6 months or more?
 - 1. Yes
 - 2 No
 - 3 Don't Know

Disability / Mobility

- 3. Does a long-term condition reduce the amount or kind of activity you do... (Please <u>underline</u> your answer)
- ... at home? Sometimes (1) Often (2) Never (3)
- ... at work? Sometimes Often Never Does not apply (4)
- ... at school? Sometimes Often Never Does not apply
- ... for transportation and recreation? Sometimes Often Never

Chronic Conditions

4. The following is a list of chronic health conditions. They are "long term conditions" that have lasted or are expected to last 6 months or more and that have been diagnosed by a health professional. If you have any chronic conditions, please identify them using the list below.

Enter a 1 if the person identified the illness

- Anemia
- Allergy (OF ANY KIND)
- Arthritis, rheumatism
- Asthma
- Stroke
- Diabetes
- If female: Menstrual Problems
- Bowel Disorders
- Stomach ulcer
- Emphysema/Chronic Obstructive Lung Disease
- Thyroid trouble or goitre
- Heart disease
- High blood pressure
- Kidney disease (stones etc.)
- Mental illness
- Recurring backaches

- Recurring headaches
- Any physical ability problem (If so, please specify which kind):

•	Cancer	(If so,	please	specify	which	kind)	
---	--------	---------	--------	---------	-------	-------	--

• Other

Weight Rating

- 1. Do you consider yourself to be...
 - 1 Underweight
 - 2 A bit underweight
 - 3 Just about the right weight
 - 4 A bit overweight
 - 5 Overweight
 - 6 Don't know / not sure

Changes made to Improve Health

- 1. In the past 12 months, did you do anything to improve your health? (For example, lost weight, quit smoking, increased exercise)
 - 1. Yes
 - 2. No
 - 3. Don't Know
- 2. What is the single most important change you have made to improve your health? If you want to indicate more than one important change, please number them in order of importance. For example 1 would mean most important, and so on.

Identify with a 1 if selected

- Increased exercise, sports or physical activity
- Lost weight
- Changed diet or eating habits
- Quit Smoking/Reduced amount smoked
- Drank less alcohol
- Received medical treatment
- Took vitamins
- Other-Please specify:

Lifestyle and Health Habits

- 1. Did you ever smoke cigarettes regularly?
 - 1. Yes
 - 2. No
- 2. At the present time, do you smoke cigarettes daily, occasionally or not at all?
 - 1. Daily
 - 2. Occasionally

	3. Not at all; at what age did yo	ou last stop?#
3. _#	During the period when you sm	oked most, how many cigarettes did you smoke a day?
4.	How many cigarettes do you no	w smoke a day?#
6.	During the past month, were you 1. Yes 2. No 3. Don't Know	ou exposed to second hand smoke on most days?
	On the average, how often do nor? 1. Every day 2. 5-6 days a week 3. 3-4 days a week 4. 1-2 days a week 5. 2-3 times a month 6. Once a month 7. Less than once a month 8. Never	you drink alcoholic beverages such as beer, wine or
9.	On the days you drink, about he	ow many drinks do you have per day? per day
10.	would be part of your norn	h of the following exercise or leisure time activities nal routine at some point during the year? For each mes in a 2 week period do you usually do it?
Ide	ntify by indicating the bi-weekly f	requency
	 Walking Bowling Baseball / Softball Golf Mowing grass Curling Gardening Bicycling Vigorous dancing Skating Aerobics Skiing Jogging Swimming Pacquet sports (Tennis, Squeet 	Number of times in 2 weeks:

Rising Above a Crisis: Resilience Processes and Community Well-Being

•	Team sports (Hockey, Basketball)	Numb	er of times in 2 weeks:
•	Shoveling snow		Number of times in 2 weeks:
•	Weight resistance training / weight life	fting:	Number of times in 2 weeks:
•	Other exercise / activity		
•	Please Specify:	_	Number of times in 2 weeks:
nera	al Well Being		

Ger

Please Read Carefully

We should like to know if you have had any medical complaints, and how your health has been in general, over the past few weeks. Please answer the following questions simply by underlining the answer which you think most nearly applies to you. Remember, the questions are about present and recent complaints, not all those you had in the past. Have you recently... (please <u>underline</u> your answer):

- Initial Coding was 1-2-3-4 (see below)
- GHQ Subsequent scoring was 0-0-1-1 (absence vs. presence of a problem)
- CGHQ scoring was 0-1-1-1 for negative statements 2, 5,6,9,10,11
- 1....been able to concentrate on whatever you're doing? (1) Better than usual (2) Same as usual (3) Less than usual (4) Much less than usual 2. ...lost much sleep over worry? No more than usual Much more than usual Not at all Rather more than usual 3. ...felt that you are playing a useful part in things? More so than usual Same as usual Less useful than usual Much less than usual 4. ...felt capable of making decisions about things? More so than usual Much less capable Same as usual Less so than usual 5. ...felt constantly under strain? No more than usual Much more than usual Not at all Rather more than usual 6. ...felt you couldn't overcome your difficulties? Rather more than usual Much more than usual No more than usual Not at all 7. ...been able to enjoy your normal day-to-day activities? More so than usual Same as usual Less so than usual Much less than usual 8. ...been able to face up to your problems? Same as usual Much less able More so than usual Less able than usual 9. ...been feeling unhappy and depressed?

Not at all	No more than usual	Rather more than usual	Much more than usual
	osing confidence in your No more than usual	rself? Rather more than usual	Much more than usual
	ninking of yourself as a No more than usual	worthless person? Rather more than usual	Much more than usual
		, all things considered? e as usual Less so than usual	Much less than usual

- 13. Thinking about the amount of stress in your life, would you say that most days are:
 - 1. Not at all stressful
 - 2. Not very stressful
 - 3. A bit stressful
 - 4. Quite a bit stressful
 - 5. Extremely stressful
- 14. Do you have someone, other than your spouse or partner that you feel at ease with, and can talk to about private matters and can call on for help?
 - 1. Yes
 - 2. No
 - 3. Don't Know

Education

Please indicate your level of education by placing a checkmark in correct box.

- 1. Less than Grade 6
- 2. Between Grade 7 and Grade 9
- 3. Between Grade 10 and Grade 12
- 4. High School Graduate
- 5. Some College
- 6. Some University
- 7. College Graduate
- 8. University Graduate

Financial Security

Questions of financial security and income are related to health and well being and are important for this study. Please remember that your answers remain completely confidential, and you cannot be identified by this questionnaire.

Economic Well-Being

1. Thinking of the past year, how many months were you employed for pay or self employed? # months

2. In what kind of business, industry or service were you employed? What is your current employment status? Are you ... 3. 1. Self-employed 2. Employed by company/organization 3. Not currently employed 4. Homemaker; care-taker of children 5. Retired 6. Student Given your annual household income and considering your monthly expenditures 4. on food, car, housing etc., would you consider your financial circumstances to be: 1. Very good 2. Good 3. Satisfactory 4. Just getting by 5. Can't cope 6. Don't know/Not sure 5. Considering everything, would you say your household is better off worse off or about the same financially today compared to 5 years ago? 1. Better Off 2. About the same 3. Worse Off 4. Don't know/Not sure Thinking of the total income in your household during the last year, what was the 6. main source of income? If selected, identify with 1, if not, 0 Wages and salaries Income from self-employment Employment insurance Social Assistance or Welfare Child Tax Benefit Workers' compensation Benefits from Canada Pension Plan Old Age Security and Guaranteed Income Supplement Other Retirement Pensions, superannuation and annuities Dividends and interest (on bonds, savings, etc.) Child Support Alimony Other; Please Specify

- What is the best estimate of the total income of all household members from all 7. sources during the past year? Was the total household income including all wages, salaries, pensions and allowances? (Please remember, no information is collected which can identify you in this study)
 - 1. \$5,000 or less
 - 2. \$5,001 \$10,000
 - 3. \$10,001 \$15,000
 - 4. \$15,001 \$20,000
 - 5. \$20,001 \$25,000
 - 6. \$25,001 \$30,000
 - 7. \$30,001 \$35,000
 - 8. \$35,001 \$45,000
 - 9. \$45,001 \$55,000
 - 10. \$55,001 \$75,000
 - 11. \$75,001 \$100,000
 - 12. More than \$100,00

Food Security

In the past 12 months, how often did you or anyone else in your household not eat the amount, quality or variety of foods that you wanted to eat because of a lack of money?

- 1. Often
- 2. Sometimes
- 3. Never

Your Community

1. Using the scale of 1 to 7 below, please rate your agreement with the following statements by **circling a number between 1 and 7**.

	1= Strongly			7=	ly			
	Disagree			A	gre			
Identify answer by the number circled								Don't
	1	2	3	4	5	6	7	Know
CWB Place Attachment 1	1	2	3	4	5	6	7	DK
I feel that I belong to this area								Al
CWB Place Attachment 2	1	2	3	4	5	6	7	DK
I am always pleased to come back to this area								
CWB Place Attachment 3	1	2	3	4	5	6	7	DK
I would like to be living in this area in 3 years time								
CWB Place Attachment 4	1	2	3	4	5	6	7	DK
I am proud to live in this area								
CWB Place Attachment 5	1	2	3	4	5	6	7	DK
I feel emotionally attached to this area								
SOC – Membership 1	1	2	3	4	5	6	7	DK
I think my community is a good place for me to live								
SOC – Membership 1	1	2	3	4	5	6	7	DK
I feel at home in this community								
SOC – Membership 1	1	2	3	4	5	6	7	DK
It is very important to me to live in this particular								
community								
SOC – Needs Fulfillment 1 and Neighbour Trust 1	1	2	3	4	5	6	7	DK
People in this community do not share the same values								
SOC – Needs Fulfillment 2 and Neighbour Trust 2	1	2	3	4	5	6	7	DK
Very few of my neighbours know me								
SOC – Mutual Influence 1 and Neighbour Trust 3	1	2	3	4	5	6	7	DK
My neighbours and I want the same thing from this								
community								
SOC – Mutual Influence 2								
I care about what my neighbours think about my actions	1	2	3	4	5	6	7	DK
SOC – Neighbour Trust 4								
I have almost no influence over what this community is	1	2	3	4	5	6	7	DK
like								
SOC – Emotional Connection 1 / Neighbour Trust 5								
If there is a problem in this community, people who live	1	2	3	4	5	6	7	DK
here can get it solved								
SOC- Emotional Connection 2								
The people who live in this neighbourhood get along	1	2	3	4	5	6	7	DK
well			Name -			500		NEW NEW PLANS
Communitarianism1	1	2	3	4	5	6	7	DK
What my community is like is very important to me								
Communitarianism2								

Working together to improve community conditions is very important to me	1	2	3	4	5	6	7	DK
CWB Decision Making 1	1	2	3	4	5	6	7	DK
Council takes notice of resident's requests.								
CWB Decision Making 2	1	2	3	4	5	6	7	DK
Local council informs residents.								
CWB Decision Making 3	1	2	3	4	5	6	7	DK
Residents are able to be involved in decisions.								
CWB Decision Making 4	1	2	3	4	5	6	7	DK
Residents can affect decisions.								
CWB Community Spirit 1	1	2	3	4	5	6	7	DK
People here can rely upon one another for help.								
CWB Community Spirit 2	1	2	3	4	5	6	7	DK
People here have friendly relationships.								
CWB Community Spirit 3								
People here could collaborate to solve a serious problem.	1	2	3	4	5	6	7	DK
CWB Personal Safety 1	1	2	3	4	5	6	7	DK
Here, it's safe to walk alone in the street during the day.								
CWB Personal Safety 2	1	2	3	4	5	6	7	DK
Here, it's safe to be alone at home during the night.								
CWB Personal Safety 3	1	2	3	4	5	6	7	DK
Here, it's safe to walk alone in the street during the night.			-					
CWB Personal Safety 4	1	2	3	4	5	6	7	DK
Here, it's safe to leave a car in the street during the night.								
Crime	1	2	3	4	5	6	7	DK
There are no problems with crime here.								
CWB Income 1	1	2	3	4	5	6	7	DK
Our income is enough for the lifestyle we enjoy.								
Employment Security	1	2	3	4	5	6	7	DK
People here are able to find work in the region.								
CWB Income 2	1	2	3	4	5	6	7	DK
Our income is enough for household expenses.								
CWB Income 3	1	2	3	4	5	6	7	DK
It's easy to afford unexpectedly large bills.								

2. Using the scale of 1 to 7 below, please rate your satisfaction with the following aspects of your area by circling a number between 1 and 7 or you can circle DK if you don't know.

	1=Very				7=Very					
	Dissatisfied					Sat	ed			
								Don't		
	1	2	3	4	5	6	7	Know		
CWB Satisfaction with Services and Facilities								DK		
1-Public transportation	1	2	3	4	5	6	7			
2-Access to cultural facilities	1	2	3	4	5	6	7	DK		
3-Access to medical services	1	2	3	4	5	6	7	DK		
4-Access to sport and leisure facilities	1	2	3	4	5	6	7	DK		
5-Access to shopping areas	1	2	3	4	5	6	7	DK		
6-Quality of schools	1	2	3	4	5	6	7	DK		
7-Quality of shopping	. 1	2	3	4	5	6	7	DK		
8-Places of worship	1	2	3	4	5	6	7	DK		
9-Child care facilities	1	2	3	4	5	6	7	DK		
10-Services for the elderly	1	2	3	4	5	6	7	DK		
CWB Satisfaction with Environment Quality	1	2	3	4	5	6	7	DK		
1-Amount of traffic										
2-Quality of air	1	2	3	4	5	6	7	DK		
3-Level of noise	1	2	3	4	5	6	7	DK		
4-Quality of water	1	2	3	4	5	6	7	DK		
5-Parking facilities	1	2	3	4	5	6	7	DK		
CWB Satisfaction with Built Environment	1	2	3	4	5	6	7	DK		
1-Cleanliness										
2-Greenery and parks	1	2	3	4	5	6	7	DK		
3-Condition of the roads	1	2	3	4	5	6	7	DK		
4-General appearance	1	2	3	4	5	6	7	DK		
5-Services from the local council	1	2	3	4	5	6	7	DK		
6-Adequacy of lighting in the night time	1	2	3	4	5	6	7	DK		

3. Using the scale of 1 to 7 below (1=Never to 7=Every Day), please rate how often you do the following activities with other community residents by circling a number between 1 and 7.

1:	1= Never			7=Every				
							y	
CWB Interaction	1	2	3	4	5	6	7	
1-Speak on the phone (with other community residents).	1	2	3	4	5	6	7	
2-Visit each other's homes.	1	2	3	4	5	6	7	
3-Go out together socially.	1	2	3	4	5	6	7	
4-Talk outdoors	1	2	3	4	5	6	7	

Community Confidence 1

- 4. In the past two years, general conditions in the community have:
 - 1. Gotten worse
 - 2. Stayed the same
 - 3. Improved

Community Confidence 2

- 5. In the next two years, do you feel that general conditions in your community will:
 - 1. Get worse
 - 2. Stay the same
 - 3. Improve
- 6. Using the scale of 1 to 7 below, please rate the likelihood of your community's ability to do the following things by circling a number between 1 and 7.

1=1	Not	Lik	ely	7	ery			
						Lik	ely	
Collective Efficacy	1	2	3	4	5	6	7	
1-My community can accomplish improvement of	1	2	3	4	5.	6	7	
physical conditions			T					
2-My community can persuade the government for better	1	2	3	4	5	6	7	
services								
3-My community can reduce crime	1	2	3	4	5	6	7	
4-My community can inform residents where to go for	1	2	3	4	5	6	7	

Community Participation

7.. In the past year:

undertake

services

1...have you participated in activities organized by groups in your community?

5-My community can be successful in the projects they

1Yes

2 No

2...have you volunteered to work for a group or an activity in your community?

1Yes

2 No

3...have you been a member of a community group or committee, and attended meetings?

1Yes

2No

4...have you been a member of a community group or committee and participated in activities outside meetings?

1Yes

2 No

8. If you do volunteer, how many hours per month would you say you spend volunteering for groups and activities in the community? #

Please state the activity:	

9. How many neighbours or community residents (Please <u>underline</u> your answer):

Neighboring Behaviour

1asked you to watch their home while they were away	None	1 or 2	Several
2asked to lend them something	None	1 or 2	Several
3asked to help in an emergency	None	1 or 2	Several
4asked for advice on a personal problem	None	1 or 2	Several
wanted to discuss a community problem	None	1 or 2	Several

10. Is there anything else you would like to say about living in your community?

Appendix 3 -C: Consent Forms

Explanation of Consent For Survey

Dear participant,

You have been asked to take part in a research study. It is up to you to decide whether to be in the study or not. Before you decide, you need to understand what the study is for. This consent form explains the study.

Purpose and Background

This survey is being conducted as part my research thesis in Community Health at Memorial University of Newfoundland. The purpose of this study is to learn more about the determinants of community well being. The focus of the survey is to get a sense of people's well being in your community.

Voluntary participation

Your participation in this survey is completely voluntary and you can decide not to take part or withdraw from participating at any time without consequence. Also, should you decide to participate, you have no obligation to answer questions that you do not wish to answer.

Length of time

The survey will take approximately 15 minutes to fill out.

Benefits

It is not known whether this study will benefit you.

Liability statement

Signing this form gives us your consent to be in this study. It tells us that you understand the information about the research study. When you sign this form, you do not give up your legal rights. Researchers or agencies involved in this research study still have their legal and professional responsibilities.

Confidentiality

No information that can identify you will be collected. Tapes will be transcribed into reports, safely kept under lock and key, then disposed of. This will protect your confidentiality.

If you are interested in obtaining the results of my thesis study, reports will be available to you and there will be a presentation of the results in the researched community.

If you have any questions about taking part in this study at any time, please contact Monique Campbell at (709) **834-3221**. You can also contact Memorial University's Human Investigation Committee at (709) **777-6974** or **777-7719**

Thank you

Signature Page

Study title: Rising Above a Crisis: Facilitators of Community Economic Development in Rural NL and Community Well Being Outcomes Name of principal investigator: Monique Campbell To be filled out and signed by the participant: Please check as appropriate: I have read the explanation of consent Yes { } No { } I have had the opportunity to ask questions/to discuss this study. Yes { } No { } I have received satisfactory answers to all of my questions. Yes { } No { } I have received enough information about the study. Yes { } No { } I understand that I am free to withdraw from the study Yes { } No { } at any time without having to give a reason I understand that it is my choice to be in the study and that I may not benefit. Yes{}No{} Yes { } No { } I agree to take part in this study. Signature of participant Date Signature of witness Date To be signed by the investigator: I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study. Signature of investigator Date

Telephone number:

Explanation of Consent for Interview

Dear participant,

You have been asked to take part in a research study. It is up to you to decide whether to be in the study or not. Before you decide, you need to understand what the study is for. This consent form explains the study.

Purpose and Background

This interview is being conducted as part my research thesis in Community Health at Memorial University of Newfoundland. The purpose of this study is to learn more about the social and economic determinants of community well being. The focus of this interview is to learn more about community development processes.

Voluntary participation

Your participation in this tape recorded interview is completely voluntary and you can decide not to take part or withdraw from participating at any time without consequence. Also, should you decide to participate, you have no obligation to answer questions that you do not wish to answer.

Length of time

The interview will take approximately 30-45 minutes.

Benefits

It is not known whether this study will benefit you.

Liability statement

Signing this form gives us your consent to be in this study. It tells us that you understand the information about the research study. When you sign this form, you do not give up your legal rights. Researchers or agencies involved in this research study still have their legal and professional responsibilities.

Confidentiality

No information that can identify you will be collected. This will protect your confidentiality.

If you are interested in obtaining the results of my thesis study, reports will be available to you through your town council. Also presentation of the results will be made in your community at the end of the study.

If you have any questions about taking part in this study at any time, please contact Monique Campbell at (709) 777-8584 or (709) 834-3221. You can also contact Memorial University's Human Investigation Committee at (709) 777-6974 or 777-7719

Thank you

Signature Page

Study title: Rising Above a Crisis: Facilitators of Community Economic Development in Rural NL and Community Well Being Outcomes

Name of principal investigator: Monique Campbell

To be filled out and signed by the participant:

I have read the explanation of consent I have had the opportunity to ask questions/to discr I have received satisfactory answers to all of my questions about the study.	k as appropriate Yes { } No {		
I understand that I am free to withdraw from the st at any time without having to give a reason	udy	Yes { } No {	
I understand that it is my choice to be in the study I agree to be tape recorded.	and that I may not bene	efit.Yes{} No{} Yes { } No {	
I agree to take part in this study. I agree to be audio taped		Yes { } No { Yes { } No {	
Signature of participant	Date		
Signature of witness	Date		
To be signed by the investigator:			
I have explained this study to the best of my ability I believe that the participant fully understands wha potential risks of the study and that he or she has fr	t is involved in being ir	n the study, any	
Signature of investigator	Date		
Telephone number:			

Explanation of Consent for Focus Group

Dear participant,

You have been asked to take part in a research study. It is up to you to decide whether to be in the study or not. Before you decide, you need to understand what the study is for. This consent form explains the study.

Purpose and Background

This focus group is being conducted as part my research thesis in Community Health at Memorial University of Newfoundland. The purpose of this study is to learn more about the determinants of community well being. The focus of the survey is to get a sense of people's well being in your community.

Voluntary participation

Your participation in this tape recorded focus group is completely voluntary and you can decide not to take part or withdraw from participating at any time without consequence. Also, should you decide to participate, you have no obligation to answer questions that you do not wish to answer.

Length of time

The focus group will take approximately 1:30 to 2 hours.

Benefits

It is not known whether this study will benefit you.

Liability statement

Signing this form gives us your consent to be in this study. It tells us that you understand the information about the research study. When you sign this form, you do not give up your legal rights. Researchers or agencies involved in this research study still have their legal and professional responsibilities.

Confidentiality

No information that can identify you will be collected. This will protect your confidentiality.

If you are interested in obtaining the results of my thesis study, reports will be available to you through your town council. Also presentation of the results will be made in your community at the end of the study.

If you have any questions about taking part in this study at any time, please contact Monique Campbell at (709) 777-8584 or (709) 834-3221. You can also contact Memorial University's Human Investigation Committee at (709) 777-6974 or 777-7719

Thank you

Signature Page

Study title: Rising Above a Crisis: Facilitators of Community Economic Development in Rural NL and Community Well Being Outcomes

Name of principal investigator: Monique C To be filled out and signed by the participant:		
Please check as appropriate: I have read the explanation of consent	Yes { } No { }	
I have had the opportunity to ask questions/to	•	Yes { } No { }
I have received satisfactory answers to all of a I have received enough information about the	Yes { } No { } Yes { } No { }	
 I understand that I am free to withdraw from the at any time without having to give a reason 	Yes { } No { }	
I understand that it is my choice to be in the salagree to be tape recorded.	tudy and that I may n	ot benefit. Yes{} No{} Yes { } No { }
I agree to take part in this study. I agree to be audio taped		Yes { } No { } Yes { } No { }
Signature of participant	Date	
Signature of witness	Date	
To be signed by the investigator:		
I have explained this study to the best of my a I believe that the participant fully understands potential risks of the study and that he or she	s what is involved in b	being in the study, any
Signature of investigator	Date	
Telephone number:		

Explanation of Consent for Crime Data

Dear RCMP representative,

You have been asked to provide data for a study. Before you decide whether you will, you need to understand what the study is for. This consent form explains the study.

Purpose and Background

This data is being collected as part my research thesis in Community Health at Memorial University of Newfoundland. The purpose of this study is to learn more about the determinants of community well being. Security is part of what makes up community well being and crime is an indicator often examined in this type of research.

Voluntary participation

Your decision to provide crime data on the case study community (ies) is voluntary.

Benefits

It is not known whether this study will benefit you personally.

Confidentiality

No information that can identify individuals will be collected. This will protect their confidentiality.

Liability statement

Signing this form gives us your consent to use the data. It tells us that you understand the information about the research study. When you sign this form, you do not give up your legal rights. Researchers or agencies involved in this research study still have their legal and professional responsibilities.

If you are interested in obtaining the results of my thesis study, reports will be available to you.

If you have any questions about taking part in this study at any time, please contact Monique Campbell at (709) **834-3221**. You can also contact Memorial University's Human Investigation Committee at (709) **777-6974 or 777-7719**.

Thank you

Signature Page

Study title: Rising Above a Crisis: Facilitators of Community Economic Development in Rural NL and Community Well Being Outcomes

ame of principal investigator: Monique Campbell			
To be filled out and signed by data holder:			
	Please	check as appropriate:	
have read the explanation of consent have had the opportunity to ask questions/to discuss this study. have received satisfactory answers to all of my questions. The have received enough information about the study.		Yes { } No { }	
 understand that I am free to withdraw from the study at any time without having to give a reason 		Yes { } No { }	
I consent to the use of data in this study.		Yes { } No { }	
Signature of representative	Date		
Signature of witness	Date		
To be signed by the investigator:			
I have explained this study to the best of my abi I believe that the participant fully understands we potential risks of the study and that he or she ha	what is involved in bei	ing in the study, any	
Signature of investigator	Date		

<u>Appendix 8-A: Factor Analysis of Questionnaire Social Capital Indicators:</u>
<u>Factor Eigenvalues and Proportion of Variance Accounted For</u>

	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
1	4.197	16.787	16.787
2	3.308	13.231	30.018
3	2.556	10.222	40.240
4	2.168	8.670	48.911
5	1.385	5.541	54.452
6	1.299	5.196	59.648
7	1.221	4.884	64.533
8	1.048	4.194	68.726
9	.967	3.866	72.592
10	.803	3.214	75.806
11	.735	2.940	78.747
12	.677	2.709	81.456
13	.652	2.609	84.065
14	.602	2.408	86.472
15	.520	2.081	88.553
16	.480	1.921	90.475
17	.399	1.595	92.070
18	.380	1.520	93.590
19	.318	1.273	94.862
20	.291	1.166	96.028
21	.259	1.038	97.066
22	.252	1.010	98.076
23	.198	.790	98.866
24	.154	.615	99.481
25	.130	.519	100.000