

Socio-economic Restructuring and Health: A Qualitative Study of British Columbia Coastal Communities

Sulan Dai

Centre for Chronic Disease Prevention and Control
Public Health Agency of Canada
Ottawa, ON
Email sulan.dai@phac-aspc.gc.ca

S. Martin Taylor

Department of Geography
University of Victoria
Victoria, BC
Email onet@uvic.ca

Communities on Canada's east and west coasts have experienced profound changes as a result of environmental and economic restructuring associated with the decline of traditional resource-based industries. The restructuring has resulted in social changes with potentially major implications for the health and well-being of individuals and communities. This study examines the relationship between socio-economic restructuring and health in four BC coastal communities—Port Hardy, Prince Rupert, Tofino and Ucluelet—by in-depth interview studies. In 2003, 66 in-depth interviews were conducted to explore factors that influence people's ability to cope with the impacts of restructuring on individual and community health. The findings suggest that differences in health status are plausibly attributable to restructuring processes and major events in each community. Economic downturn is clearly linked to poorer health. Employment opportunities are central to the vitality of communities, key to the quality of life of their residents, and related to individual and community resilience or vulnerability. The study concludes that socio-economic restructuring has had

an impact on the health of BC coastal communities and their residents in the last two decades, especially in the last ten years. While traditionally resource-dependent industries have declined, the emergence of new alternative economic activities has not been strong enough in the coastal communities to withstand the economic downturn brought about by the restructuring process that has increased employment stress for both residents and their communities. This study deepens the understanding of the complex relationships between socio-economic change in coastal communities and the health and well-being of their residents.

Introduction

Studies of restructuring have explicitly considered its impacts on the social and economic fabric of communities as well as on the health and well-being of their residents (Wilkinson 1996; Williams et al. 2000; Ommer 2002). It is seen to impact the health of individuals and communities through its effects on social structure and process, particularly amplifying income and social inequalities (Wilkinson 1996; Marmot and Feeney 1997; Mackenbach 2002). As Hertzman notes, "Rapid economic change affects population health. Rapidly expanding economies are associated with increasing health and rapidly contracting economies are associated with declining health... the period of rapid economic contraction was also a time of increasing income inequality" (Hertzman 2000).

Communities on Canada's east and west coasts have experienced profound changes as a result of environmental and economic restructuring associated with the decline of traditional resource-based industries, principally fishery, forestry and mining. This restructuring has resulted in social changes with potentially major implications for the health and well-being of individuals and communities. *Coasts under Stress* (CUS) examines the effects of restructuring on coastal communities in British Columbia (BC) and Newfoundland and Labrador. The *social ecological framework* for the CUS project as a whole recognizes the complex interactions among environmental, institutional, industrial and social processes, in order to address the full range of determinants and outcomes related to environmental, community and human health over time (Dolan et al. 2005; Dai 2006; Ommer and the Coasts Under Stress Research Project Team 2007). While the *social ecological framework*

describes broad-level interactive restructuring processes, as a part of the CUS project, this study focuses more specifically on the relationships between socio-economic restructuring and the health of communities and their residents in the BC coastal region.

Given the rapid changes that have impacted the coastal communities in the past two decades, using a population health approach, this study examines the relationships between socio-economic restructuring and health by exploring a broad range of individual and community factors. Specifically, the theoretical framing of this study derives from the work of Bourdieu on forms of capital (Bourdieu 1986) which is nested within the larger conceptual framework of the CUS study (Ommer and the Coasts Under Stress Research Project Team 2007). Although stated at an abstract and broad societal level, Bourdieu's conceptualization of different, but interrelated, forms of capital—economic, cultural and social—have application and grounding in the empirical realities of coastal communities as places in which the processes and dynamics of restructuring impact socio-economic and physical infrastructures and the everyday lives of their residents.

At a lower level of resolution, Hancock has articulated the concept of community capital as an amalgam of social, ecological, human and economic capital (Hancock 2001). Community capital is seen to be a vital attribute and fundamental asset of places with direct implications for health and well-being at the community-wide and individual levels. Hancock does not invoke Bourdieu's broader concepts and arguments in his conceptualization, preferring to focus more on the forms of civil society, policies, programs and practices that make for healthy communities. Nevertheless, we suggest that the connections are neither strained nor inappropriate. Moreover, by making the links, the study of healthy communities can be situated more clearly and firmly in an emerging body of social theory centered on the role of social capital as a determinant of health (Hancock 2001). For the purposes of this analysis of the impacts of environmental and socio-economic restructuring on the lives and livelihoods of people in coastal communities in BC, Hancock's four components of community capital are adopted as the conceptualized organizational categories, while giving consideration to the broader societal framework within which the study is situated (Hancock et al. 1999; Hancock 2001).

Capital assumes various forms (Marshall 2003). Fisher points out that capital is not any particular kind of wealth, but a stock of wealth of any kind existing at an instant of time. Capital of any kind always

occupies a position (Fisher 1997). “Capital is a generalized ‘resource’ that can assume monetary and non-monetary as well as tangible and intangible forms” (Anheier et al. 1995; McClenaghan 2000). Whereas economic capital refers to monetary income as well as other financial resources and assets, human capital refers to properties of individuals, such as education, training skills and income (Anheier et al. 1995). Human capital accumulation determines individuals’ earning capacity and employment prospects, and the level and distribution of income in society (Blondal et al. 2002). Cultural capital exists in various forms, including long-standing dispositions and habits acquired in the socialization process. It is the capacity to define and legitimize cultural, moral, knowledge, artistic values, standards and styles (Anheier et al. 1995).

The study of health of individuals and their communities is the study of people and the places in which they live. A place shapes people’s lives and identities because, as a locality, a place reflects not only a physical setting, but also a collection of meanings, feelings and values. People form a varying degree of emotional bonds with particular places—sense of place and place attachment (Tuan 1977; Williams and Stewart 1998). In this sense, a place can also be viewed as capital.

Social capital refers to connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them. All types of capital can be derived from economic capital through various effects of transformation. Economic capital is the most liquid. By comparison, the convertibility of social capital into economic capital is costlier and more contingent; social capital is less liquid, stickier and subject to attrition (Anheier et al. 1995; McClenaghan 2000).

To examine the relationship between socio-economic restructuring and health in BC coast, four BC coastal communities—Port Hardy, Prince Rupert, Tofino and Ucluelet (Figure 1) have been selected as case studies to explore individuals’ perceptions of the social and economic conditions of communities that affect population health in the coastal communities.

Study Communities

The economy of BC is comprised of distinct regional economies in terms of their industrial structure and social composition. In this context, BC coastal communities have traditionally depended on

Figure 1: Map of BC and the Study Communities



Source: <http://www.mapquest.com/atlas/main.adp?region=bcolumbia>

resource sectors. During the last two decades, primary industries such as fisheries, forestry and mining have declined, while new jobs have emerged in tourism and service sectors. Economic change in BC coastal communities is not isolated from trends in global economic development. Global economic pressures have had significant economic and social impact on these BC coastal communities (Glavin 2000; Hayter 2000). Stresses are being felt particularly in communities that traditionally relied on staple production in the fishery, forestry and mining industries for employment and social stability (Glavin 2000; BC Stats 2002; Baglole 2004; Catch-22 Research Team 2004). Resource-dependent towns struggle to cope with socio-economic restructuring due to technological advancement, globalization and industrial organization (Barnes et al. 1999; Barnes et al. 2001). Many of the towns are isolated (Randall and Ironside 1996). They are also disadvantaged in employment, education, and population health. Compared to Vancouver Census Metropolitan Area inhabitants, people in the study region have a shorter life expectancy, a higher cancer mortality rate, a lower university completion rate, and fewer new businesses forming (BC Progress Board 2002; McEwan 2004).

To understand what makes a community distinctive, why some communities are booming while others are at risk, and what makes

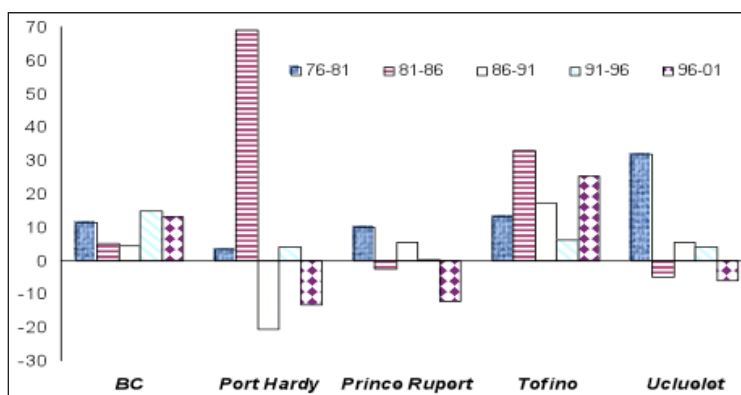
a community resilient or vulnerable in the process of restructuring, four coastal communities—Port Hardy, Prince Rupert, Tofino and Ucluelet were selected as case studies. Located along BC's coast, the four communities are more resource-dependent than the overall provincial economy, and they have experienced more difficult times than the province as a whole (Coastal Community Network 2002). Additional factors considered in selecting the study communities were: 1) coverage of the resource-based industries of interest to the overall CUS project and overlap with the geographical areas where other sites of the CUS project took place; 2) cultural diversity and variation in population size; and 3) variability in the experience of, and response to socio-economic and environmental change. Such changes include the decline of the resource-based industries (forestry, fishery and mining) on which the local economies have traditionally depended, as well as population decline (especially in Prince Rupert and Port Hardy) over the last two decades (Table 1 and Figure 2). It is worth noting that the criteria used in selecting the study communities help the comparability of the data from the four places to address the research purposes, given the many similarities of these places. Nevertheless, the selection criteria also present certain challenges for data analysis. For instance, the difference in town size would raise concerns. Dai (2006) provides a full discussion on the selection criteria used and how the related concerns were addressed.

Table 1: Selected Information on the Study Communities

	BC	Port Hardy	Prince Rupert	Tofino	Ucluelet	
Location	West Canada	The largest North Island centre	The largest North Coast centre	Pacific Rim		
Land area (km ²)	934,169.4	40.9	53.6	10.6	6.6	
Population (2001)	3,907,738	4,574	14,643	1,466	1,559	
Population Change (%)	13.05	-12.39	-13.42	25.30	-5.97	
First Nations (%)	1996	3.8	3.0	31.1	4.3	10.8
	2001	4.4	5.7	29.8	8.2	12.2

Source: Statistics Canada: Community Profiles, 1996 and 2001, and Official Community Plan of each community.

Figure 2: Change of Population (%) by Community, 1976 – 2001



Source: (Moffat 2001; Statistics Canada); Statistics Canada (2002): Community Profile.

In the BC coastal context, restructuring is not a single event but rather is a cumulative process over at least the past 25 years. In contrast to other studies (Kasl and Cobb 1982; Kessler et al. 1988), this study does not focus on short-run impacts of a specific event, but instead examines the health status of individuals and communities following cumulative changes to a local economy over a longer period of time. Studies have been done on the consequences of healthcare and medical service restructuring for population and community health (Joseph and Chalmers 1995; Halseth and Sullivan 2000; Hanlon and Halseth 2005; Joseph and Cloutier-Fisher 2005). Ostry and his colleagues focused their studies on forest workers from 14 BC sawmills to examine the relationships between de-industrialization on working conditions and self-reported health. Downsizing in BC sawmills eliminated more than 60% of workers between 1979 and 1998. The sawmill sector's downsizing and restructuring had an impact on the health of the workers. Many workers who lost their jobs left for other employment opportunities. However, compared with those workers who, under the pressure of de-industrialization, left the sawmill industry and obtained re-employment outside the sector, those workers who remained in the sawmills tended to have a poorer self reported health status and poorer working conditions (Ostry, Barroetavena et al. 2000; Ostry, Marion et al. 2000a; Ostry, Marion et al. 2000b). However, studies of the consequences of socio-economic restructuring for the community and human health are rare.

This study examines the relationship between socio-economic restructuring and health in four BC coastal communities by a community health survey (N=1,204) and in-depth interview (N=66) studies. The findings of the survey analyses indicate that: the communities lag behind the province of BC and Canada as a whole in terms of self-reported health status; health status differs significantly among the communities as do recent changes in health status and stress level; the main predictors of general and emotional health status and stress are a healthier lifestyle and higher socio-economic status (SES), along with a higher level of community satisfaction (Dai 2006). The follow-up in-depth interviews provide a deeper understanding of the relationship between restructuring and health. This paper focuses on the in-depth interview study.

Method

Personal interviews are a common and powerful way to understand human experience in its social context (Fontana and Frey 1998). In-depth interviews are conversations in which the researcher encourages the informant to relate, in their own words, experiences and attitudes of relevance to the research (Walker 1985). Through interviews, the researcher gains greater clarity, insight and depth of understanding about the complexity of experiences and questions.

The importance of in-depth interview data is the insights that are gained, with the quality of such insights taking precedence over the sample size (Wainwright 1997). In this study, participants were selected by "purposive sampling", where criteria used to identify suitable individuals who could offer rich information on restructuring and health (Curtis et al. 2000) included willingness to be interviewed and at least 10 years of residence in the respective communities. In order to maximize potential insights and to facilitate comparative analysis, participants from both 'vulnerable' and 'resilient' groups were selected based on their survey data.

The vulnerable group consisted of the survey participants who rated their personal economic and employment situations as having worsened, and their self-rated health as poor or fair, and very stressful or considerably stressful in their life. The resilient group consisted of the survey participants who rated their personal economic and employment situations as having improved, and their self-rated health as excellent or very good, and not at all stressful or

slightly stressful in their life. To provide additional insights, 25 key informants (KI) were also selected from the four communities. The key informants included mayors, RCMP officers, social workers, realtors, employment counsellors, the Chamber of Commerce managers and others (Table 2).

Table 2: Sample Selections and Interview Participants in the Communities

Community	Population change (96-01), %	Survey N	Potential interviewees	Target sample	Survey Respondents		KI	Transcripts
					V	R		
Port Hardy	-12.39	227	143	10-12	6	4	7	15
Prince Rupert	-13.42	683	407	10-12	6	5	7	18
Tofino	25.30	178	110	10-12	4	6	3	10
Ucluelet	-5.97	116	74	10-12	6	4	8	16
Total	13.05*	1,204	734	40-48	22	19	25	59

*V: Vulnerable group; R: Resilient group; KI: Key Informants; * BC's population increased by 13.05% from 1996 to 2001(Statistics Canada).*

The interviews were guided by a checklist which focused on the key topic: how has socio-economic restructuring impacted you and your community? Specifically, different forms of capital have been probed, such as economic capital, social capital, and so on. The average time for all interviews was 48 (20-111) minutes. Fifty nine of the 66 interviews were taped with a digital recorder based on participants' willingness and were subsequently transcribed. The 59 interviews came from 61 participants since two couples were interviewed at the same time. Table 3 lists the main characteristics of the interview participants.

A qualitative study involves critical assessment and interpretation of the participants' narratives to understand their experience. Sufficient detail and context for the data interpretation (Pyett 2003) are important so that the analysis produces rich stories (Reville and Seymour 2001). The choice of which stories and whose voices ultimately prevail is a complex process. In this case, the analytical framework was based on the two major themes, restructuring and health. Restructuring included social restructuring and economic restructuring, and health included individual health and

Table 3: Description of the Interview Sample

Sample 1: From survey respondents		PH	PR	Tofino	Ucluelet	Total
Gender	Male	6	6	6	5	23
	Female	4	5	4	5	18
Age	19-44	4	4	6	3	17
	45 or over	6	7	4	7	24
Ethnic background	First Nations	1	1		2	4
	Non-First Nations	9	10	10	8	37
Education	Grade 1-12	2	7	4	5	18
	Certificate/college	5	3	2	4	14
	University degree	3	1	4	1	9
Employment	Homemaker				1	1
	Retired	1				1
	Unemployed	1	4	2		7
	Leave of absence		1	1		2
	Self-employed	3	1	1	4	9
	Paid work	5	5	6	5	21
Marital status	Married/common law	9	8	7	8	32
	Widowed			1		1
	Divorced/separated	1	2	1	1	5
	Never married		1	1	1	3
Family income	Up to \$39,999	2	6	2	3	13
	\$40,000-69,999	3	3	3	2	11
	\$70,000 and more	4	2	4	4	14
Total respondents from survey		10	11	10	10	41**
Sample 2: KI		PH	PR*	Tofino	Ucluelet	Total
Gender	Male	4	4		1	9
	Female	1	5		5	11
Total KI		5	9	0	6	20**

* There were seven interviews with nine individuals in Prince Rupert.

** There were 61 participants with 59 interviews (two couples were interviewed together): 29 females, 32 males, aged 26-69.

community health. Data analysis focused on exploring these themes and sub-themes and identifying the linkages among them. Using the Qualitative Solutions and Research software (QSR N6), the 59 text files were coded by developing both Tree Nodes and Free Nodes¹.

The Tree Nodes were generated by each category and sub-categories and focused on comparing factors affecting community and resident resilience to negative health status changes. The Free Nodes were coded by specific issues, such as Clayoquot Sound protests. The nodes were searched and compared to generate major themes and sub-themes. This thematic analysis created the basis for a synoptic assessment of the general relationship between restructuring and health, and the factors contributing to resilience/ vulnerability at the individual and community level. To determine the relationship between various nodes, two different “combining operations”—*Intersection and Overlap*² were used. For example, to find those people who talked about resource-based industry (tree node 2), who mentioned decline or downsizing (tree nodes 2.1 and 2.2) and who did not regard their community as being healthy (tree nodes 1 5), the *Intersection* operation was used to identify the text units that contained all these topics. The *Overlap* operation revealed the text units which contained any of the above selected nodes.

Results

To avoid biases and make sure the voices are representing the residents’ perceptions of the relationship between restructuring and health, the quotes have been selected from general and specific viewpoints expressed by both vulnerable and resilient groups, and the KI from the four communities.

Economic Capital and Economic Restructuring

Economic restructuring includes resource-based economies in decline and service sectors expanding in all four communities. Such restructuring has resulted in a transformation of the role of economic capital, affecting local economic diversity, quality and availability of

¹ Node is a container for any item in a project that the researcher may wish to refer to. Nodes can represent anything that matters to a project. Tree Nodes can be organized hierarchically to represent categories and sub-categories. Free nodes are nodes the researcher can create at any time for any purpose.

² The Combining operations locate text units that belong to combinations of nodes. Intersection is an operation that will find text units coded by both of two or more selected nodes. Overlap is an operation that will find overlapping text units coded at any of the selected nodes.

employment for the four communities, which the residents claim to have negatively affected community health.

Resource-based Industry Decline and Economic Diversity

In Port Hardy, Prince Rupert, and Ucluelet, there is a general consensus that the economy is in decline. The mayor of Port Hardy sees the local economy “probably at its bottom right now, not moving one way or the other” while the mayor of Prince Rupert described the present economic situation as “terrible, absolutely terrible.” Many people expressed concern that forestry and fishing, formerly key primary resource industries, no longer have the capacity for employment of a decade or two ago. As well, these communities have seen job reduction in related secondary industries, for example wood and fish processing. The negative economic situation has been exacerbated by a downturn in several sectors at the same time. Local residents lacking alternative economic activities were inadequately prepared to cope with the rapid economic change.

“It’s not a good economic situation right now. This town has enjoyed, even prior to me coming here ten years ago, this town was booming, it was doing very well, we had a copper mine, the logging industry was up and running very well, the fishing industry was doing really well. Since then, the mine is shut down...and it was about at the same time that the fish industry was drastically cut back. And at the same time the logging industry took a bit of a beating, so it all kind of came at once.” (Port Hardy KI)

The community reported dismay at the plummeting of their major industries with no alternative economic activities, reflecting insufficient economic diversity. Also in Prince Rupert, many people hope for the re-opening of the Skeena Cellulose Mill, its largest employer previously, while the interviews were conducted in early 2003. In early 2004, the mill totally shut down.

“When the main economic driving forces are not working, the mill is not working, forestry is not what it used to be, fishing is not what it used to be and while they are working hard to diversify their industry, it is just not coming fast enough.” (Prince Rupert KI)

As a former fishing village, Tofino also watched its fisheries disappear. However, it has transformed into an internationally renowned tourism destination. The economic outlook in Tofino, in contrast to the other three communities, is relatively positive. In addition to the growing tourism industry, aquaculture is also expanding, with two companies providing direct year-round employment for approximately 245 people, although not all of whom are Tofino residents. There is a clear sense that this economic success is rooted in Tofino's economic diversification.

"In most small coastal communities we were only reliant on primary industries, fishing, logging that sort of thing and long before that fell out, this community was already diversifying. This place became an alternative place to stay, it became the bastion for the environmental community and then for the artist's community and everything else that goes along with that. We were well diversified long before the fall-out of those primary industries." (Tofino Respondent)

Comparatively, Ucluelet also saw its roots in a fishing village but became a logging company town. People in Ucluelet reminisced about "the good old days" as they struggled with current conditions of economic depression, due to job losses and little government support for small businesses. Today, this resource-rich town is shrinking, and hardly able to cope with restructuring within its major employment sector, the forest industry. A former fisherman recalled how even inexperienced people used to find work easily.

"Back to twenty years ago, it was easy to get a job... guys with no experience would just go out and shake the herring and be instantly rich, make like a ton of money basically overnight. Yeah, I made \$8,000 in three days." (Ucluelet Respondent)

Another Ucluelet informant gives a riveting regret of being stuck in the town in the economic downturn, and not having sold his business some ten years earlier. The Clayoquot Sound protest in 1993 stopped the logging of old-growth forests, and also highlighted the importance of value added forestry industries in this town (Moore 1993; Langer 2003). Eventually, government promises faded, leaving small businesses to falter. He lost any chance of selling his business.

“If I had known ten years ago what I know today, I would have left this town. In 1994 I would have just sold everything and got out. But I put my trust in the government who was promising all kinds of good things, like value-added industries, jobs, jobs, jobs.” (Ucluelet KI)

Tourism Growth and Quality/Availability of Employment

Active promotion of tourism is important to regional economic development. Tourism has significantly flourished in Tofino.

“Most definitely has benefited from development. The town has benefited from our tourists.” (Tofino Respondent)

“Tofino is a money generating place [which] makes it really stand out on Vancouver Island; it makes it very, very different from Ucluelet and Port Hardy and other ports.” (Tofino Respondent)

Tourism may be the boost Ucluelet needs to charge up its economy; however, it has no desire to replicate Tofino.

“They have to understand that they [the community] need it [tourism], but they don’t want to overcrowd it. It’s a beautiful place to live; they don’t want to ruin it. In Tofino they have houses on top of one another; there is hardly any space over there now.” (Ucluelet Respondent)

Some individuals expressed concern that tourism-related employment pays less and is less stable than working in traditional resource-based jobs. Residents in coastal communities recognize these shortcomings and express concern about the nature of employment opportunities available to them.

“Tourism is now growing, but that is a whole different thing, and it doesn’t provide full time employment so it is not anything that many people can raise a family on. The way I see it, tourism makes a handful of millionaires richer, and it provides part-time work at \$10 or \$12 an hour for three months a year.” (Ucluelet Respondent)

“Well there is no work for people, and the work is, if you do want to work, it’s pretty menial jobs and there doesn’t

seem to be a lot of money coming in, and people want to hold on to their money and they don't know what is coming next. So things are pretty bleak right now." (Prince Rupert Respondent)

Employment Insurance/Income Assistance

Along with economic restructuring, policy changes in social services have more seriously impacted people who need Income Assistance (IA), such as the closure of local social service offices, funding cutbacks and the increase in number of hours required have made it more difficult for people to access social support. In the case of EI, individuals must accrue minimum hours or earnings in the year preceding their claim in order to qualify for benefits. With shortened seasons at fish plants and reduced commercial fishing openings, many people do not qualify for EI for the duration of the off-season.

"What has happened is that because of the short processing season, those who are qualifying for EI, they are working two plants, so it is 24/7 that they are going. The amount of hours that they managed to get only gets them through to maybe December for most of the shoreworkers...for the average shoreworker, it is a real struggle. There are a lot of people that just don't qualify." (Ucluelet KI)

"These plants now run 24 hours a day, 7 days a week. They run two 12 hour shifts and they run 4 shifts a week, so a person can actually work a full plant, work Monday to Thursday at one plant, and Friday to Sunday at the other plant and some of them do that, because that is the only way they can get enough hours in to get EI, to make enough money to survive in the winter, so they work seven days a week for three or four months and then take their winter." (Ucluelet Respondent)

In sum, the decline of the resource-based industry has led to job losses and reduced income while obstacles grew in acquiring social services. For individuals in Tofino and Ucluelet, there is the added challenge of physically accessing these services as there are no longer local government representatives for EI or IA programs, necessitating access by computer or by travel to Port Alberni 85 km away.

Ecological Capital

Ecological capital includes physical place, and natural resources, as well as ecosystem. Place shapes the nature and quality of one's life (Kirby 1982). Among respondents from all four communities, most people felt that their quality of life was enhanced by clean air and water, close proximity to ocean and forests, and access to wilderness-based recreation such as hiking, fishing, hunting, and boating.

With beautiful physical settings, a small population, Tofino attracts as many as one million international travellers yearly. Naturally, the Pacific Rim is a paradise for tourists with its spectacular setting, which is ideal for hiking, kayaking, canoeing, fishing, horse riding, and whale watching. In historical terms, Tofino received its name from the Spanish in 1792. At the same time, the First Nations people hunted grey whale and were virtually undisturbed until 1913, when European-style development began. Goods were transported between Tofino and the Lower Mainland by ship until WWII, when a military airport was constructed. Roads were constructed in the 1970s, and Tofino began to evolve from an isolated fishing village into a tourist destination in the 1990s. Today, tourism is booming in Tofino, evident at the junction of Highway 4, more than 90% of the drivers turn right to Tofino as opposed to Ucluelet. People also know of the famous Long Beach in Tofino.

"Wherever, right and "where are you at?", "well I am in Ucluelet", "well, how do you spell that and where is that?", "well it is out on the west coast by Tofino", "oh, yes I know where that is". Tofino is now known nationally and internationally and people know where Tofino is, but they don't know where Ucluelet is." (Ucluelet Respondent)

This reflects an important geographic issue, that is, for a place to really matter, a location is important and the name is also significant. Lack of a clearly identifiable focus, lack of a symbolic signal and lack of large spaces for public gatherings are also some of the negative reasons for Ucluelet failing to attract tourists. The fact that Ucluelet lacks a clearly identifiable focus was pointed out more than ten years ago, but the issue was not heeded until today. Despite the fact that Ucluelet has over 32 km of waterfront, there is no immediate perception of a coastal community (District of Ucluelet, n.d.).

Tourism cannot become an alternative economic activity to offset the economic decline of Port Hardy and Prince Rupert. The two

communities, with populations larger than that of Tofino, cannot attract sufficient travellers for tourism to be a sole economic driver. However, geographically, Port Hardy and Prince Rupert are more marginalized, and further away from a large urban centre like Vancouver. They actually serve as large centres in their respective regions, surrounded by many smaller communities. Although tourism has increased in the past few years, it is still not as strong as it is in Tofino. All these communities have a clear sense about the need to develop a diversified economy, but they are not able to rely on tourism. "We are too far out as an island community, and we are a little too far out for the tourists. Our summer is short, it's two months at the most" (Port Hardy respondent). They prefer to have "a little bit of everything," such as value-added forestry and fishery industries, and some tourism. Several respondents expressed concern: "I was a logger. I cannot imagine how I can sit there with a computer all day long. Oh, it will kill me." Once funding is cut radically, the training programs in three of the four communities are affected. "We need support from the government, definitely," urge the respondents.

The naturally ice-free Port of Prince Rupert is the third largest in the world and BC's closest port to Asia. Confined by its geographic location, the Port of Prince Rupert can hardly compete with Vancouver's port. As a result, Prince Rupert's port has experienced a decline in shipments of grain and coal, which are two major commodities traditionally handled by the port before the time of conducting the interview. "We were looking death in the eyes," recalls Prince Rupert Port Authority president and CEO Don Krusel of those dark days. Its traditional bulk exports—pulp, paper and lumber—were deserting it for container ports such as Vancouver. The port in Prince Rupert, which had moved about 800,000 tonnes of forest products in 1988, shifted just 20,000 tonnes in 2005, its last year of operation (Prince Rupert Port Authority n.d.; Whiteley 2007).

However, since 2006, the Port of Prince Rupert has undergone substantial re-development in response to China's emergence as the world's new manufacturing workshop. Prince Rupert's port is poised to handle a lot more traffic, as it is North America's nearest deep-water port to Asia, closer than the Port of Vancouver by at least one day. However, the Port of Prince Rupert has a great deal of work to do, in order to compete successfully with other ports (Prince Rupert Port Authority n.d.; Whiteley 2007). It is unclear that, to what extent, the growth of Prince Rupert's port can contribute to the

economy in the region. Up to 2006, the latest census data indicated that Prince Rupert was still in decline, as its population decreased by 12.5% and its unemployment rate reached 12.9% (Table 4). Similar to that of the 2001 Census, the results of the 2006 Census for the four study communities reveal that, while BC's population increased by 5.3%, except for Tofino, the study communities experienced further decline.

Table 4: Population Change in 2006 by Community

		Port Hardy	Prince Rupert	Tofino	Ucluelet	BC
Population	2001	4,574	14,643	1,466	1,559	3,907,738
	2006	3,822	12,815	1,655	1,487	4,113,487
	Change (%)	-16.4	-12.5	12.9	-4.6	5.3
First Nations (%)		12.7	35.1	5.7	13.5	4.8
Unemployment rate		11.8	12.9	5.2	6.9	6.0

Sources: Community profile, Census 2006, Statistics Canada.

Social Capital and Social Restructuring

The following sections examine residents' perceptions of sense of community, quality of life, and social networks within their communities and how socio-economic restructuring has impacted community health through the change of social capital.

Sense of Community, Safety, Social Networks

Generally, the respondents have invested in their communities, hold strong family ties, and have chosen to stay in the community, despite substantial changes to the economy, downsizing of social services, and changes to the local population demographic. In Port Hardy, Prince Rupert, and Ucluelet, there was a general consensus that the sense of community was strong, that social networks were well-developed, and that community members had similar expectations and hopes for the towns. Residents indicated that one of the key factors contributing to a strong sense of community was the presence of family and friends.

"I love Prince Rupert so much that I can't see myself moving away from Prince Rupert [even] with the economy the way

it is right now. I've been here all my life and I love it, I still have family and friends here so I don't think I will ever live anywhere else." (Prince Rupert Respondent)

"I think it is a wonderful place to live. We wouldn't have been here for 28 years if it didn't suit us. We feel very comfortable here, we have a very close network of friends, long-time friends and we like it." (Ucluelet Respondent)

Other factors mentioned by interviewees that influence sense of community include familiarity among community members, support for families experiencing tragedy or crisis, and participation in community activities and events. These characteristics are indicative of communities with high levels of both informal and formal social capital and contribute to a well-developed sense of trust—trust between community members but also more generally, trust in the social norms that create and reinforce a safe community. Emphasis was placed on the mutual support provided in times of stress, especially from family and friends. Many people stated that their very good friends were also their neighbours.

"My mom lives here too and she helps out."

"I have lots of friends here, family lives right here."

"I have a good core of friends that I have grown up with here, and colleagues that have now become my friends."

"Good friends, good neighbours. Like the time when I got one of those notices that your hydro is going to get cut off or whatever, I've got a friend next door, and he said, 'don't worry about it, pay me back when you can', and half the time he just writes it off, he just says forget it, Merry Christmas or whatever."

"I've got good neighbours across the street, anytime I feel down, I go talk to them. "

Many people reported finding support through clubs, volunteering, and church life. These types of community engagement were especially important for those without family locally.

"I don't have much family out here, mostly through my support groups, there's a clique of us."

However, many residents reported that families have been negatively impacted by the local economic decline and stories of divorce, spousal abuse, and separation were common.

“Their unemployment insurance is running out, families are breaking up, and I think that is fairly consistent in the community, and not that that is totally based on economics, there are probably issues in the family regardless, but this certainly didn’t help.” (Ucluelet Respondent)

“Again, that’s not only physical abuse but it’s mental...I think that financial stress is the leading break-up of the home. And when that happens, then all the mental anguish comes in on top of it, so now you not only have financial trouble, you have mental stress. It’s trouble.” (Port Hardy Respondent)

“I hate to tell you how many couples have split up, because financially that is the hugest stress in the whole wide world, if you can’t pay your bills. And people have had to leave town to work, so consequently you have wives raising children here on their own.” (Prince Rupert KI)

There is a strong correlation between healthy families and healthy communities. Families need economic stability in the form of secure employment opportunities and access to supportive community services and social networks in order to be healthy and resilient. Conversely, strong families are essential to promoting and maintaining healthy communities (Weissbourd, 2000). The communities of Port Hardy, Prince Rupert, and Ucluelet, already dealing with the serious economic consequences of declining resource-based industries, now face subsequent social issues associated with family vulnerability due to economic hardship. At the same time, some of the social services (e.g. Child and Family Services, Women’s Centres) that are designed to support families are being cut back. The loss of employment coupled with reductions in social services is proving extremely challenging for many families in these three coastal communities.

In the study communities, informal social networks are common and develop easily because the towns are relatively small and, as residents explained, “everybody knows everybody.” Social networks that develop among neighbours, co-workers, and members of organizations are reinforced in small communities because people

are generally connected on more than one level. Your co-worker is also your neighbour, your children go to school together, you play ball in the same league, and you see each other at the grocery store on a regular basis.

Although many residents characterized the general sense of community as being strong, in Port Hardy, Prince Rupert, and Ucluelet, there were conflicting views as to how socio-economic restructuring has affected sense of community. Some residents feel that, due to declining populations and shifting personal priorities, people have become more insular and that there is less involvement in community activities and governance. This suggests that the social capital created through individual involvement in structured events and organizations is diminished as membership and interest in these social institutions declines.

“A lot less people now, less involvement, less people interested and people are keeping more to themselves...in survival mode you might say...In the summer, we’ve got Filomi Days—Fishing, Logging, and Mining. Well, it’s just basically logging now, there’s no fishing any more really, very little, and the mining’s gone. Back then there were organizers and it used to be a lot of fun. We still got it, but it’s not the same.” (Port Hardy Respondent)

“I have been fighting for this, I have been struggling to keep my job, and I am just watching my life go down the tubes,’ and they really have a sense of why bother.” (Ucluelet Key Informant)

Other community members, however, feel that challenging economic times and decreased access to some social services has strengthened connections between community members and resulted in a stronger sense of community as people join in support of one another.

“When people are in dire needs, they do come together; small communities do that, great support for the community. If they have a special event, sometimes they will hold something in one of the bars...to help out a family, and people just seem to come out of nowhere and throw money at you.” (Prince Rupert Respondent)

Statements such as these give the impression that informal social capital—social networks, trust, and reciprocity—is boosted as the negative repercussions of socio-economic restructuring become apparent. Residents in Tofino described their sense of community in different ways than did the residents of the three other communities. Words such as “fragmented,” “bitterness,” “vague,” and “dissension” were used when discussing the local sense of community.

Social Services

Publicly funded services such as women’s centres and legal aid, child and family and mental health services, EI and IA contribute to social capital in a community. Women’s centres provide venues for networking and information gathering; legal aid, child and family and mental health services provide emotional, physical, and financial supports for families to encourage healthy relationships both among family members and with the community as a whole; EI and IA allow for individuals and families experiencing employment instability to stay in their communities, maintaining their contribution to local social capital. While all four study communities have experienced considerable economic change in the past twenty years, provincial government policies of centralization and reductions in social spending are having repercussions for social capital in coastal communities.

Concerns about the availability of mental health services were voiced in several communities. A Prince Rupert KI felt that the two mental health workers in the community were so overloaded with cases of chronic and persistent mental illness that they were unable to provide services to anyone experiencing periodic depression or mental stress due to economic or family distress. In Ucluelet, a respondent with a history of depression expressed concern over the available mental health services.

“Well the mental health, it fluctuates. Sometimes we have a worker here and sometimes we don’t and sometimes the ones that we have aren’t really very qualified or very good...So I find that quite lacking.” (Ucluelet Respondent)

There was noted concern in Port Hardy about the availability and quality of child and family services. Several residents commented on staff reductions in the regional office, an office that services not only Port Hardy but also Port Alice, Port McNeill, Alert Bay and up the coast as far as Bella Bella. Throughout BC’s coastal communities,

people feel that at a time when the need for social support services is greatest, the availability has decreased. While in Tofino, the negative effects of reduced services may be mitigated somewhat by the strong economy, in Port Hardy, Prince Rupert, and Ucluelet there is little economic capacity within the community to buffer the loss or reduction of publicly funded services.

As government reduced funding for service provision and training programs, numerous respondents voiced concern, especially over cuts to IA, changes to EI regulations, and shrinking health care services. Local community needs for specialists, mental health care, and even some general health care are challenging to meet. One Port Hardy respondent with heart disease had to travel to Victoria or Vancouver to see specialists routinely. This was difficult for him and his wife because the trips strained their health conditions. While both retired seniors planned to move to Victoria or Vancouver, they could not sell their house due to Port Hardy's economic decline.

"We always have to leave [to access special health care], and very few specialists, as they cut back funding, the trips that specialists used to take up here periodically are becoming less and less. So we have to go down wherever it is...now we have to travel to see them." (Port Hardy Respondent)

In comparison, Prince Rupert did not appear to be in a better situation.

"Every department [in the hospital] that I can think of has lost staff in the last year or people are leaving and they are not being replaced, not necessarily that they lost their job, somebody moved away, we are not going to fill that position." (Prince Rupert Respondent)

Human Capital

The human capital of a community consists of "healthy, well educated, skilled, innovative and creative people who are engaged in their communities and participate in governance" (Hancock 2001). A community with a diverse population of people contributing a variety of skills, a range of knowledge, with assorted interests and views has substantial resources at hand to cope with challenges and adversity. Maintaining and increasing human capital is a key for community health.

Declining population is a challenge facing many coastal communities, as fishing, forestry, and related industries have declined, and residents have been forced to leave communities in order to find work. Out-migration decreases the pool of skilled labour in each of these communities and thus has repercussions for individual involvement in community leadership and activities and decreases local economic viability.

“The closure of Skeena Cellulose has got huge implications, and that sector, again, you don’t see it when it’s operating, but that is where the hockey coaches come from, so socially it has quite an impact on Prince Rupert as well. Anybody that has skills has gone, they have left.” (Prince Rupert KI)

“I think that a lot of people who were leaders in the community were also executives at their companies, and they have left. We have seen the achievement levels in the schools, that’s a good indication; we have seen that drop, because they are coming from families with less expectation, is what we surmise from what we have seen. And some of that sophistication in leadership has gone.” (Port Hardy Respondent)

In contrast to the other three communities, Tofino has seen its population increase since the 1980s. Among the four communities, Tofino has the best employment situation, a smaller proportion of First Nations, and residents with generally higher education levels and more active lifestyles (Table 5). Its vibrant and varied economy has attracted people with an assortment of skills and expertise.

“There are many opportunities, and I believe at many different levels of society, even for highly, highly educated people where you wouldn’t expect opportunities in a small town, this town is very different as I am sure you have picked up. There is a white collar sector in a town this small, that is amazing, it is bizarre...there are people running private consultant firms, there are people who do bizarre things on stock markets and lawyers and stuff like that who are able to run their businesses from here and of course these people require ancillary services, people to take care of their computers, and whatever those people do...so basically this is not in the least a typical small town.” (Tofino Respondent)

This continuing influx of people to Tofino is one of the key factors that sets it apart from the other three study communities. The human capital of Tofino increases as more and more people choose to make this community their home, while in Port Hardy and Prince Rupert especially, this valuable resource continues to decline because residents are unable to make a living in the present economic climate.

In addition to Hancock's explanations of the importance of social, ecological, human and economic capital that contribute to community capital (Hancock 2001), the concept of cultural capital also plays a significant role in the study communities. Cultural capital can improve our understanding of the way in which social origin provides advantages in social selection (Lamont and Lareau 1988). Culture refers to group-defining customs and patterns of behaviour (Williams 1983). Social well-being entails the history that has caused a particular population or community to accept some conditions that another community would define as unacceptable (Green and Ottoson 1999). Communities, especially small ones, are characterized by social control which is based on personal relationships in a restricted space; their particular cultural characteristics are rooted in their history, hence in a tradition (Mormont 1990).

Table 5: Characteristics of Survey Sample

		Port Hardy	Prince Rupert	Tofino	Ucluelet	BC
Gender* male		38.8	49.0	43.3	44.8	45.8
First Nations**		9.7	18.9	4.5	7.8	14.0
Unemployment**		7.9	14.8	3.4	3.4	10.7
Married / common law*		72.7	65.4	59.0	66.4	65.9
Education**	Post-high	57.7	53.8	73.3	61.2	58.0
	Grade 1-12	42.3	46.2	27.7	38.8	42.0
Exercise frequency**	High	46.5	46.2	61.6	49.1	48.8
	Low	53.5	53.8	38.4	50.9	51.2
Alcohol consumption**	Heavy	45.4	48.3	67.6	56.0	51.3
	Low	54.6	51.7	32.4	44.0	48.7

**Significant at .01 level; *Significant at .05 level (Pearson Chi-Square Test)

Note: figures are percentages

Traditionally, Tofino was a fishing village whereas Ucluelet was a logging company town. Culturally, Tofino residents have the willingness to open themselves to new concepts and accept newcomers. People in Tofino were more likely to work as fishermen, and unlike timber harvesting, fishing is even more seasonal with ups and downs. The downs forced Tofino families to turn to alternative ways of making a living, such as bed and breakfast (B&B). However, people in Ucluelet preferred to work as loggers, and back in the early 1980s, life was much easier for loggers.

“You know, the major difference between Tofino and Ucluelet is the culture, traditional logging town vs. fishing village. Tofino’s tourism started from the mid-1980s, fishing is always seasonal, up and down, with its tradition, their families would run B&B during a low fishing season. Logging was more stable with higher wages before the 1990s”. (Tofino Respondent)

Ucluelet was named in 1861 by First Nations and the name means “safe harbour”. The first European settlers in Ucluelet started with the seal fur business in the 1880s, but gradually, fishing and forestry dominated, and Ucluelet remained a logging company town until the 1990s. A respondent from Ucluelet was very upset about the logging: “40 years logging, nothing left ... Ucluelet did not have any development for more than seven years; we are angry because we don’t have control in development.”

Culturally, Port Hardy was a logging, fishing and mining town. To a large extent, forestry, fisheries and port formed Prince Rupert. “I really think that the beauty and the roots of this community are resource-based. They go so deep and actually I really think it would be a shame to try to change it to tourism and heavy industry of any kind” (Prince Rupert Respondent). Although plans are under way to build some infrastructure, like a cruise ship dock in Prince Rupert; Port Hardy also wants to attract the cruise line industry. However, tourism is only a partial solution for improving the economy.

Discussion

There were several noteworthy findings from the interview studies: 1) BC coastal communities were in transition during the last two to three decades, and the changes in the economic sector were

especially significant; 2) socio-economic change has impacted the health of individuals and their communities; and 3) the factors that contribute to community health may be traced to different forms of capital.

The qualitative studies revealed several recurrent themes on bonding the different forms of capital and their relationships to community health. From Hancock's perspective, a mixture of social, ecological, human and economic capital contributes to community health. Notably, social capital has an important effect on the relationships between individuals and individuals/communities, and the existence of these relationships helps residents cope with stress to a certain degree. However, more importantly, a prime feature of economic restructuring was the decline in local employment, which resulted in stress and ill health for some residents. Whether communities can provide employment opportunities to their residents depends on the availability of an alternative economy. A community's ability to develop alternative economic activities is a measure of the strength with which that community is able to withstand external economic pressures. To a large degree, alternative economic activities are the key factors making resilient or vulnerable individuals and communities. For many communities, diverse economic activities can serve to sustain residents in the community. At the individual level, the availability of an alternative economy signifies an additional income source. In the absence of alternative employment opportunities, a community and its residents are vulnerable to the process of socio-economic restructuring.

The experience from Tofino shows that economic capital cannot be developed successfully without its bonding with human capital, social capital, ecological capital, cultural capital and a sense of place. In the wake of the collapse of the traditional fishing industry, rapid growth in the tourism industry brought renewed prosperity. Individual levels of health and stress in Tofino differ significantly from the other three communities. No participants from Tofino reported knowing individuals whose health had been negatively affected by the economic restructuring and most rated their health as very good. Tofino and its residents have benefited from tourism, an alternative economic activity that has been strong enough to offset the community's loss of resource-based industry. Conversely, Port Hardy and Prince Rupert, and to a lesser extent Ucluelet, suffer from a lack of job opportunities.

Due to a lack of alternative economic activities, the other three communities are vulnerable to economic change, and they have faced employment stress, weakened community services, out-migration, family break-ups, and poor health. Ucluelet has experienced less negative impacts than Port Hardy and Prince Rupert in terms of population decline and health status, partly due to its proximity to Tofino (40 km). Port Hardy and Prince Rupert are very vulnerable to the adverse impacts of restructuring and to failure in coping with ongoing change, as reflected in their poor economic performance and major out-migration.

The survey results suggest that health status is lower and stress level higher for some sub-groups, such as Prince Rupert residents, women, the unemployed, low income earners, and individuals with low levels of social capital and social cohesion. The interview findings confirm that those with lower SES are especially vulnerable to health and stress problems. For this sub-group, socio-economic restructuring has resulted in increased employment stress and decreased social services. As a result, their vulnerability is compounded by outcomes frequently associated with job loss—*income insecurity, health problems, family break-up, and inadequate access to social support, and reemployment training services.* This combination of factors can produce a vicious cycle leading to chronic unemployment and a negative outlook on the prospects for themselves and their community. For a thorough discussion of the comparisons of the health outcomes for the ‘vulnerable’ versus the ‘resilient’ sub-groups, see (Dai 2006).

Therefore, the building blocks of community health include not only Hancock’s mixture of social, ecological, human and social capital, but also the cultural capital defined by Anheier and Gerhards, and the sense of place argued by Tuan (Tuan 1977; Anheier et al. 1995).

Conclusion

The study provided a powerful tool for exploration of the relationships between socio-economic restructuring and the health of individuals and their communities. The findings of this study indicate that socio-economic restructuring has impacted all four communities over the last two decades, especially in the last ten years, due to a decline in resource-based industries. Restructuring processes and events have affected the health of the coastal communities and their residents. Employment opportunities are

central to the vitality of communities and the quality of life of their residents and thereby are key factors that make an individual and community resilient or vulnerable. Several factors condition the extent to which a community is resilient in response to the challenges posed by restructuring. Principal among these is the capacity to generate new job opportunities through the development of an alternative economy. To a considerable extent, such has been the case in Tofino where the combination of the physical environment, geographical access, local business acumen and community support has fostered the growth of a booming tourism industry, although this rapid growth and associated changes have brought their own challenges. Communities lacking these positive predisposing factors typically struggle in times of restructuring and economic decline. This is the case in Port Hardy and Prince Rupert where both communities are struggling with the shrinkage and closure of their traditional resource-based industries, and, in the absence of alternative sources of employment, have experienced population decline and a certain degree of deterioration in the health of the community and remaining residents. Compared to the other three communities, Ucluelet has been less resilient than Tofino yet less vulnerable than Port Hardy and Prince Rupert. Problems persist due to the forest industry decline, but many residents can find seasonal jobs in Tofino, and some residents have tried to open tourism oriented businesses.

Factors that make an individual resilient or vulnerable are strongly related to community health and individual health, and the two are interrelated. Community health is related to the strength of the local economy and availability of job opportunities, while individual health is related to individual SES and the level of family and social support. Resilient individuals are those that are employed, with high income, better health status, and low stress. Vulnerable individuals are unemployed, have low income, experience family break ups, feel ill health and higher stress, and lack family and social support.

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