

NRE² BUILDING RURAL CAPACITY IN THE NEW ECONOMY

Measuring Social Capital at the Community Level

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- Acknowledgements:
- Social Sciences and Humanities Research Council of Canada
- The Rural Secretariat of Agriculture and Agri-food Canada
- Rural Citizens in our field sites
- NRE Team

- Focus on rural issues: rural revitalization
- Working over 7 years
- Used and collected data at household/individual, site, regional, national, international levels
- Census, surveys, interviews, observation, historical, participation (qualitative and quantitative, multidisciplinary)
- Working with 32 systematically selected rural sites in all parts of Canada
- Making use of social capital frameworks

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Social Capital

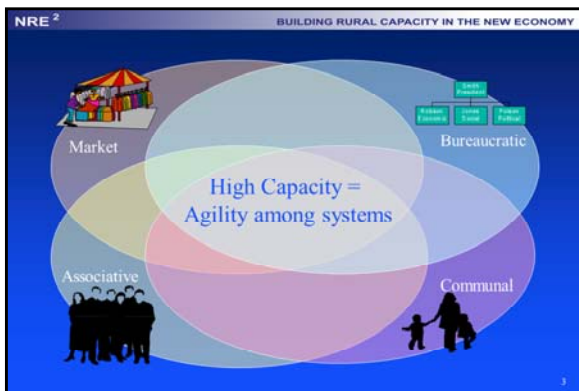
relationships, networks, and associated norms that facilitate collective action

- One type of asset or resource (stock)
- Social assets potentially useful for outcomes
- Based in four types of social relations and action

Capacity Model 2

In our model, Social Capital refers to:

- (S) Relationships and networks, and the norms that allow people to function effectively to organize for social action (outcomes)
 - It is rooted in social organization and behaviour
 - (S) It is a type of asset
 - (S) We focus on social assets that are potentially useful for outcomes (future production) (broadly defined)
 - (S) As SOCIAL capital it is based on types of social relations and social action
 - We have found it useful to consider these relations in terms of four fundamental types
-
- They only exist and show themselves by social organization and action (networks)
 - Easiest seen in the form of institutions, organizations, groups, collective events, networks
 - Local school represents available social capital insofar as its physical infrastructure and associated relations are operational
 - Social capital is not the infrastructure of the school, but is embedded in the relations that make a school work
 - The school buildings and their use are the tracings or evidence of the social capital that created them and keeps them going.
 - Much like the paths in a cloud chamber are not the atomic particles, but the evidence of their passing
 - We use this feature to measure the AVAILABILITY of social capital
 - But we also are able to measure the extent of USE of social capital
 - This is an important distinction – as we will show, since not all available social capital is used
 - Part of our work is to look at this relationship – and its potential for innovation and revitalization
 - We will use these features in the measurement of social capital
- Turn to the questions posed by the PRI



- Four basic types of social relations
- These are ways in which people co-ordinate their action to produce outcomes
 - Include norms for behaviour, assumptions regarding membership, principles by which resources are distributed, and systems of legitimation
- (S) Market
 - Based on contractual relations – usually short term, exchange oriented, guided by demand and supply
 - Predominate in commercial interactions, housing markets, job markets, and all levels of trade relations
- (S) Bureaucratic
 - Classic rational-legal relations as articulated by Weber
 - Guided by general principles and interlocking roles as reflected in by-laws and organigrams.
 - Predominate in corporations, public institutions, many NGOs
- (S) Associative
 - People come together and organize their activities around a common interest
 - Participate so long as this interest is being served – or is likely to be achieved
 - Predominate in voluntary organizations, social action groups, emergency responses
- (S) Communal
 - People organize their behaviour with respect to family, ethnic, or other complex loyalties
 - Inclusion and exclusion usually guided by ascribed characteristics or strong identities
 - Don't have the single-focus outcomes as found in Associative relations
 - Predominate in families, gangs, cults, etc.
- These four systems are interrelated – most often within the same organization, group, or locale
- They operate at multiple levels (households, communities, regions, nations)
- (S) All forms are necessary in a complex, changing environment - The more agile a group is in being able to use all systems, the greater will be their capacity - especially under conditions of change
- These 4 types of relations lie at the basis of social capital
- Social capital should, therefore, be conceptualized and measured with respect to the types of social relations underlying it.
-
- Rural Revitalization research
 - Market and Bureaucratic predominate in the New Economy
 - Rural people have traditionally been strong in Associative and Communal
 - For Rural Revitalization – they need to build capacity in Market and Bureaucratic
 - Research: How can this be done?
- These four systems are interrelated – most often within the same organization, group, or locale
 - (S) Several of our research sites relied primarily on associative relations in the face of school closings. In some, the citizens learned how to articulate, lobby their case on the basis of bureaucratically recognized principles, and got their school back.
 - the Hutterite community next door to one of them uses communal relations intensively (family supported by religious belief) and combines them with bureaucratic relations (again legitimized by religion) to successfully compete using market relations (have even been able to expand while others fail).
 - In this case, the three systems reinforce one another
- Each is supported and enforceable by socially recognized institutions (entitlements, laws)
 - market relations supported and controlled by trade agreements, competition legislation, labour law, and the courts
 - authority relations controlled by legislation, corporate law, and the better business bureau
 - associative relations controlled by civil law, municipal by-laws, social norms, and informal sanctions
 - communal relations controlled by legislation, family law, government support agencies, and public norms

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How is this “collective” share of social capital to be measured?

- Social capital is about social relations
- Reflected in institutions, organizations, groups, events (AVAILABLE social capital)
- Reflected in the USE of these groups and networks
- Rooted in 4 types of social relations

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How is this “collective” share of social capital to be measured?

- We make use of 4 propositions
 - Social capital is about social relations (organizing action)
 - Reflected in institutions, organizations, groups, collective events (formal and informal)
 - This is AVAILABLE social capital
 - Institutions are the manifestations of social capital and provide the potential for its use.
 - Reflected in the USE of these organizations, groups, and networks by individuals and groups
 - This is what we refer to as the USE of social capital
 - Four bases for social relations and action (each with its own norms for behaviour, participation, distribution of benefits):
- We construct measures based on these propositions
 - At the level of the sites (‘collective’) – consider this to be AVAILABLE social capital
 - At the level of individuals or households – do they USE the available social capital?
 - Measures are sensitive to the 4 types of social relations (also have an overall summated index)

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Measuring AVAILABLE Social Capital

- **Market relations:** Enterprises, Financial institutions (formal and informal), commercial services
- **Bureaucratic relations:** Schools, Gov't organizations, corporations
- **Associative relations:** Voluntary associations
- **Communal relations:** Family networks, Daycares, Senior citizens' centres, Religious organizations, Community-integration events

nk Sites

Main points

- Same general perspective guides our measurement decisions for both the availability and use of social capital
- I will focus on availability first
- I won't get into the details of the measures (these are available in other documents), but will give you an idea of the types of institutions and groups as classified by the 4 types
- We have used the information we collected at the site level (our profiles and IWG data) to identify the different types of organizations and groups within the site.
- Collected an inventory of businesses, services, volunteer groups, annual events, media services, health, transportation, recreation, education and other facilities within 30 minutes of the site.
- Classified them into the predominant type of relation they represented
- (S) Created an index for each of the 4 types
 - Log transformation of several of the counts to reduce the impacts on the index of some of the more frequent organizations or activities (number of businesses, religious institutions, community events)
- Created a summary index
- Conducted basic validity checks

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Measuring USE of Social Capital

- **Market-based:** Employment, M-Internet, market services, employment organizations, market support
- **Bureaucratic-based:** B-Internet, bureaucratic services, actions re. bureaucracies, bureaucratic support
- **Associative-based:** A-Internet, associative services, associative-based groups, associative actions, associative support
- **Communal-based:** C-Internet, sharing goods, sharing services, family support

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Main points:

- Important difference between having social capital available and using it
- Use implies some level of ability and competence with the respective type(s) of social relations
- Using our HH data we look at the kinds of networks in which people are involved:
 - **Market-based:** Employment, use Internet for business, use market services, participate in employment organizations, turn to market for support
 - Imply familiarity with market relations
 - **Bureaucratic-based:** use Internet for bureaucracy, use of bureaucratic services, actions directed to bureaucracies, turn to bureaucracies for support
 - **Associative-based:** use Internet for associations, use of associative services, participation in associative-based groups, actions reflecting associative involvement, turn to associative for support
 - **Communal-based:** use Internet for communal relations, sharing goods with family, sharing services with family, turn to family for support
- The distinction between social capital and its use raises an important empirical issue: how are they related?

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What are the most appropriate levels of analysis for evaluating collective social capital?
 What are the limits of aggregation of individual social capital for estimating collective social capital?

- Depends on the purpose
- Our objective: Rural Revitalization
- Strategy:
 - Examine multiple levels (households, sites, regions, provinces, nation)
 - Examine social capital within and across levels

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•What are the most appropriate levels of analysis for evaluating collective social capital?

This is closely related to the other question regarding levels:

•What are the limits of aggregation of individual social capital for estimating collective social capital?

•Depends on the purpose of analysis

•Social capital can be found at multiple levels: small groups, communities, regions, nations

•The purpose of the analysis should drive the selection of levels

•For example, our objective is Rural Revitalization:

•If too small (e.g. household – insensitive to the aggregation effects of community or regional groups)

•If too large (e.g. province – insensitive to the local dynamics and options for choice of municipalities or regions)

•Strategy:

•Examine multiple levels for various purposes (households, sites, regions, provinces, nation for rural revitalization)

•Examine social capital dynamics within and across levels

•We are doing this – see next slide

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Substitutions and Complementarities

Within Levels

Sites: Market, Bureaucratic, Associative correlate 🏠

HHs: Bureaucratic, Associative, Communal correlate 🏠

Across Levels

Available social capital not always used . 🏠

Type of social capital matters . 🏠

Census proxies depend on type of social capital . 🏠

Policy: Third sector strategic choice for economy

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- In what ways are the various types of social capital substitutable or complimentary?
- Within levels:
 - Site level (AVAILABILITY)
 - Sites that have high levels of Market-based social capital are also likely to have high levels of Bureaucratic and Associative social capital (less Communal based)
 - All correlations are positive: any type of social capital can be used to build capacity
 - HH level (USE)
 - Households that use Bureaucratic-based social capital are also likely to use Associative and Communal-based social capital as well.
 - Lower correlations between Market and Bureaucratic-based social capital
 - All correlations are positive: also good news for building capacity
- Across levels:
 - Available social capital (at the site level) is not always used (by HHs)
 - The type of social capital matters
 - e.g. The availability of Market-based social capital has stronger relationships with the use of Bureaucratic and Associative-based social capital than with the use of Market-based social capital (and it has a negative relationship with Communal-based social capital)
 - Our search for proxies for social capital using census data has met with moderate success. It matters what type of social capital is being examined, however. It also matters whether one is aggregating up from USE or distributing down from AVAILABILITY
- **Policy implications:**
 - To build capacity in Market-based relations – better to support Associative over Bureaucratic-based social capital (good news for the Social Economy?)
 - *Indirect or multiple strategies for building social capital may be more effective (since most policies have direct application at site levels).*
- **Research implications:**
 - *Need data collected and appropriate for multiple levels – including with respect to social capital, other assets, and outcomes*
 - *Add this requirement to the previous one: need data sensitive to various types of social capital*
 - *Also true for exploration of census proxies for types of social capital (appropriate proxies vary)*

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Can communities be analyzed as "networks of networks"?

- Networks used in complex ways
 - e.g. Health: Communal, Associative, Bureaucratic integration
- Low correlation between community as action and community as perception
 - e.g. social cohesion 

Policy: multiple strategies for social cohesion

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Can communities be analyzed as "networks of networks"?

- Presume – this raises the issue of the definition of community and its relationship to social capital
- Prefer to sidestep the issue of the definition and move to what we are finding in our analysis regarding:
 - How people use their social capital networks
 - Its relationship to how they understand their 'community' (issues of social cohesion)
- People use their networks in complex ways
 - e.g. dealing with health issues: complex integration of communal, associative, and bureaucratic (communal necessary for access to bureaucratic)
 - Family serves as broker, emotional support, transport service, and labour for all the demands associated with dealing with health services
- Sometimes use of social capital is related to 'community' and sometimes not
 - Reflected in our work on social cohesion
 - Low correlation between social cohesion as perceived and use of **local** social capital
 - *We followed similar approach to social cohesion as we did with social capital: 4 types of relation but limited to within 30 minutes of the site*
 - *Perceived measured by judgments regarding their communities*
 - *Also have maps of their 'community' – overlays (not yet analyzed from this point of view)*
 - Social processes related to local support and identity are likely to be different
- Policy:
 - Strategies for getting things done (resilience) are only weakly related to strategies for building identity
 - Multiple strategies required.

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Does context have specific effects on production and use of social capital?

- **Yes** (more social capital use in): 
 - Connected to global economy
 - Fluctuating local economy
 - Remote from metropolitan centres
 - Low institutional capacity
 - Socio-economic leaders
- Condition relationship between social capital and outcomes . 

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Does context have specific effects on production and use of social capital?

- Yes: we have conducted considerable analysis of this
- Research designed to examine 4 major contextual effects on the field sites
 - Connection to global economy
 - Stability of local economy
 - Proximity to metropolitan centres
 - Proximity to institutional capacity
 - Leading or lagging economic status
- They show a relationship to most types of social capital use (*only with Fluctuating=high Market availability at site level*)
 - Global and Fluctuating: more Total, M, A, and C
 - Non-Metro adjacent: More Total, A
 - Low Capacity: More Total, C
 - Leading: More Total, M, A
- They significantly condition the relationship between social capital and outcomes
 - Market-based social capital makes greatest contribution to HH incomes
 - But: Market-based social capital negatively related to population change
 - But: Context matters:
 - Market-based social capital is important for these outcomes only in globally-connected, not-adjacent, or high-capacity sites

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Policy Implications

- Build from social capital strengths
 - Social capitals are substitutable
- Organize for incompatibilities
 - e.g. Bureaucratic and Associative
- Adapt to local conditions
 - Non-metro: Associative and Communal
 - Globally connected: Associative
- Develop multiple measures

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Policy Implications

- Build from social capital strengths
 - People, groups, and communities have strengths in different types of social capital
 - Transfers and substitutions can be made between the various types
 - Thus: we can build on the local strengths to increase social capacity in areas of need
 - e.g. Non-metro adjacent rural areas tend to be strong in associative and communal-based social capital
 - Can be used to develop competency in bureaucratic (first, because it has highest correlations) and market-based social capital
- Recognize and plan for incompatibilities
 - Not all four types are easily compatible
 - e.g. bureaucratic demands for accountability can undermine associative demands for focusing on specific interests
 - People are happy to volunteer until the paper-work and red tape emerges
 - Recognize and build in ways to overcome these incompatibilities when partnering (e.g. pay and organize for accountability)
- Adapt to local conditions
 - Non-metro: Associative and Communal social capital is highly used
 - Globally connected: Associative social capital is highly used
- Develop multiple measures
 - Social capital is not just about participating in social groups
 - Can take many forms
 - Can transfer in many ways
 - Also, social capital operates at multiple levels
 - Therefore, we need measures that are sensitive to these various forms and levels
- Support research exploration
 - Conceptual and measurement problems will always be with us
 - Must push our models along sufficiently far to evaluate their robustness and utility (even if there are a trail of uncertainties along the way)

Measuring Social Capital at the Community Level


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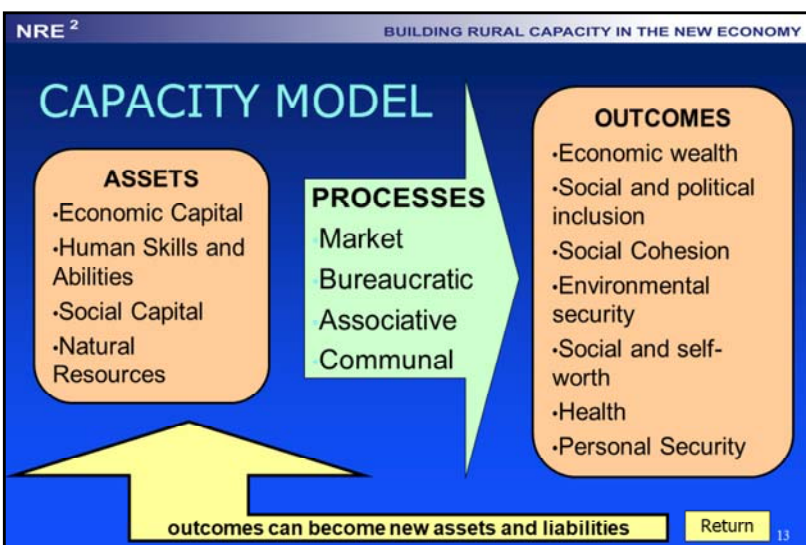
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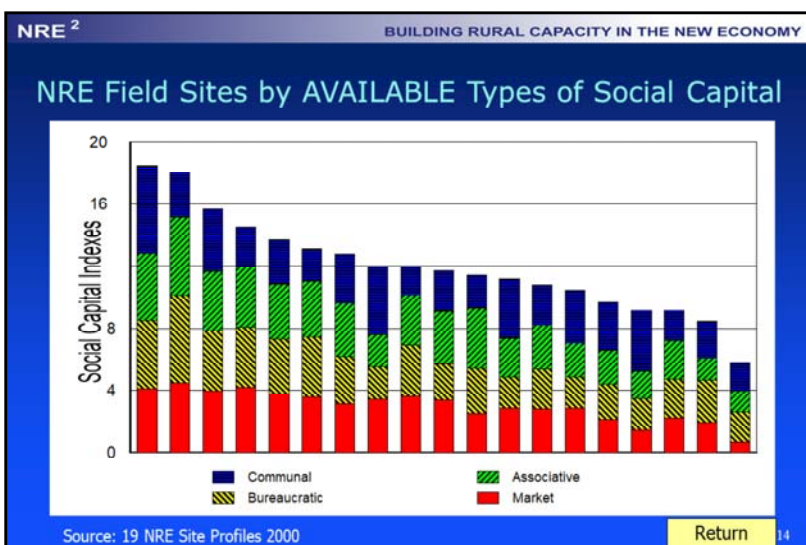
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Start with the central framework

- Capacity is the ability to organize assets to produce outcomes (ability to get things done)
- ‘Ability doesn’t mean that it is actualized – it is potential “Capacity to do...”
- Presents some major challenges for measurement and research into capacity
 - How do we know when a community has high or low capacity?
 - Some communities are more likely to be able to organize their assets than others
 - Eg: 2 communities may look the same, but one treats their forest as a wasteland, other as a community resource – What makes the difference?
 - But we won’t know this ahead of the game – we don’t know which direction one will take over the other: which has the greater capacity?
 - Instead: we see only the results of capacity
- Thus our research strategy is to:
 - Use past evidence to identify the processes that are involved (past evidence – post hoc)
 - Develop and test theories about the conditions that facilitate or inhibit the actualization of capacity
- We have found it is useful to identify the ways in which people get together to produce outcomes
 - How they seem to work more effectively under some conditions and for particular type of outcomes.
- We are convinced that by recognizing and understanding these processes, we will not only be able to improve capacity, but identify new options for revitalization in the recombination of assets and organizations.



- Main points:
- Provide you with an idea of how these levels of social capital distribute among our field sites
 - Graph represents each field site:
 - Heights represent the total social capital
 - Colours represent the types of relations at the basis of the social capital
 - Significant variation – in sites and within types of social capital by sites
 - i.e. each site has its relative strengths and weaknesses with respect to social capital
- Potential for useful information that can inform policy and local action
 - Recognizing the variation in the types of relations: allows us to see ways in which we can build on the strengths of particular communities to enhance the types of relations in which they are weak.
- To do this we need to understand:
 - How do they relate to each other?
 - Do they reinforce or inhibit each other?
 - Under what conditions?
-
- NOTE: Indexes standardized to national range (z-scores + 3)
- Average = 3
- 19 field sites

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Correlation between Types of AVAILABLE Social Capital: Site-level

	Bureaucratic	Associative	Communal
Market	.76**	.84**	.29
Bureaucratic		.87**	.12
Associative			.13

(r) 19 sites – raw sums with skewed variables logged ** p<.01
Source: NRE Site Profiles 2000 Return 15

Main Points: [Spearman’s rho: .79**, .81**, .26; .87**, -.02; .09 i.e. same pattern]

- Table represents correlation coefficients
 - Max = 1
 - .76 – the higher the availability of market-based social capital, the higher the availability of bureaucratic
- High correlations between Market, Bureaucratic, Associative
 - If high in one respect, then high in another
 - Except for communal-based social capital
- All positive
 - Little evidence of substitution at the site level
 - If low with respect to one type of relation, then high with respect to the other
- [Reflecting site size?
 - Divided sample of sites into 3
 - Same overall pattern remained except for [see table below]:
 - Reduction of Market-Bureaucratic and Bureaucratic-Associative correlations in medium-sized sites]
- Suggests:
 - Little substitution (compensation for low level sites)
 - Bad news: potential vulnerability for sites – if they are low with respect to one type of relation, they are likely to be low with respect to others [positive feedback loop]
 - Good news: is that social capital in one area can be built by improving it in another area (except for communal)
 - In Hussar, they were weak with respect to capital for a new arena, so they turned to their associative and communal strengths to build their market strength
 - This is encouraging since we are hypothesizing that rural areas are relatively strong in associative and communal types of relations, but weak in market and bureaucratic (the latter 2 are important in the NRE)
- As previously mentioned, we need also to distinguish between AVAILABLE social capital (in institutions) and the USE of social capital

.....
Measures of Social Capital

•These correlations (r) are with indexes constructed as the sums of the raw scores from each item, but with the skewed items logged (# businesses, #religious establishments, #events)

Site Sizes (values in parentheses = Spearman’s rho):

	Small: N=7; 55-255hhs			Med: N=7; 245-520 hhs			Lrg: N=5; 605-1930 hhs		
	B	A	C	B	A	C	B	A	C
M	.96**(.93)	.90**(.78)	.17(.46)	.70(.64)	.93**(.88)	.04(-.07)	.96*(.98)	.91*(.60)	.13(-.10)
B		.90**(.85*)	.06(.32)		.52(.52)	-.05(-.14)		.99**(.67)	.01(-.05)
A			.01(.31)			.16(.32)			.03(-.30)

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Correlation between Types of USE of Social Capital: HH-level

	Bureau.	Associative	Communal
Market	.18	.28	.27
Bureau.		.37	.41
Associative			.29

(r) 1995 HHs – sums of logged items p<.01
Source: NRE HH Survey 2001

Return

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Main Points:

- Table:
 - Correlation again
 - .18 = statistically significant, but not strong
 - Highest value is between bureaucratic and communal (.41)
- Differences in correlations
- Lower than site level – probably due to larger sample size
- All positive
 - Means that if a HH is high in one type it is likely to be high in the others
- Suggests:
 - Little substitution (compensation for low level HHs), but
 - Yet still opportunities for action:
 - Skills in market relations may be improved by working through strength in associative
 - Use of government services is associated with family networks, etc.
- Raises the question: What are the conditions that encourage or support the use of various types of social capital?

	1 person HHs: N=288			2 person HHs: N=805			3-person HHs: N=228		
	B	A	C	B	A	C	B	A	C
M	.10**(.04)	.24**(.18)	.23**(.18)	.05(-.01)	.23**(.22)	.21**(-.19)	.26**(.25)	.38**(.38)	.30**(.26)
B		.39**(.34**)	.37**(.31)		.34**(.33)	.37**(-.35)		.40**(.39)	.37**(.37)
A			.32**(.28)			.25**(.24)			.33**(.31)

	4+ person HHs: N=674			Variation					
	B	A	C	1-p HHs	2-pHHs	3-pHHs	4+pHHs		
M	.27**(.26)	.33**(.33)	.18**(.18)	.49**(.40)	.70**(.66)	.64**(.62)	.70**(.70)		
B		.38**(.38)	.44**(.45)	.22**(.18)	.03(.02)	.18**(.10)	.02(-.03)		
A			.29**(.28)	-.17**(-.35)	-.16**(-.21)	-.16*(-.21**)	-.22**(-.24)		
C				-.24**(.28)	-.17**(-.21)	-.20*(-.26**)	-.29**(-.30)		

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AVAILABLE Social Capital is not always USED

USE of SoKp (HH-level)	AVAILABILITY of Social Capital (Site-level)				
	Market	Bureau.	Assoc.	Comm.	Total
Market	.12	.08	.21		.15
Bureaucratic	.22	.13	.35		.29
Associative	.20	.09	.28		.22
Communal	-.18	.09	.07	.05*	
Total	.19	.12	.32		.25

• (r) (N=1849) Unless otherwise indicated p<.01; * p<.05
 • Availability is measured at the site level (Source: NRE Site Profiles 2000)
 • Use is measured at the household level (Source: NRE HH Survey 2001)

Return 17

First – To what extent are the available types of social capital actually used?

Main points:

- Correlation coefficients for the relationship between AVAILABILITY of social capital and its USE

- [Technical problem of level of analysis: site level and HH level

- Can create problems for estimation of statistical significance]

Findings and Implications

- Weak relationships between availability and use of SoKp

- Diagonal shows low relationships between same-type social capital availability and use

- Off-diagonals:

- Availability of communal-based seems unrelated to most forms of USE

- Show some opportunities

- .21 in top row: higher relationship between associative-based relations and use of market-based SoKp

- Possible Implications: Various types of SoKp underutilized, opportunities lost?

- Policy: Building infrastructure for SoKp may not always have direct effect on its use

- E.g HRDC policy directed to community capacity-building may have limited effects on the actual use of various types of social capital

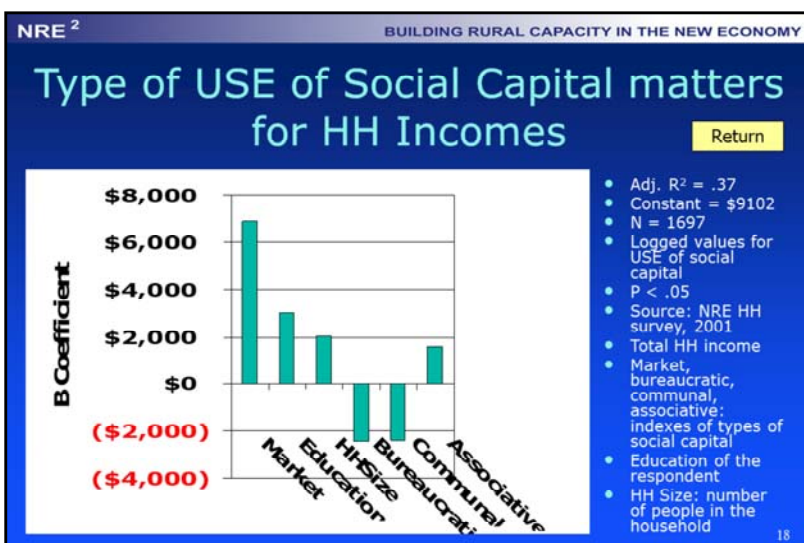
- Most policies directed to site-level characteristics (social capital), not to HH-level

- May have limited effectiveness in building household social capital\

- Need more research to understand how the processes operate at the 2 levels and

- How the 2 levels relate to each other

- Next - Does social capital make a difference?



- HH Incomes regressed on 4 types of social capital use, education, HH size
- Values of B coefficients from regression
 - Larger the coefficient, the more the impact on the HH incomes
 - E.g. – HHs using high levels of market-based social cohesion increase their HH incomes by about \$7,000
 - The different types of social capital can have very specific benefits for rural communities
- This data is a demonstration of the way in which social capital can contribute to outcomes at the household level
- I have selected incomes since it is related to so many other key aspects of household livelihood and quality of life
- [We have measured social capital in 2 ways
 - Its availability
 - Its use
 - Not highly associated]
- In this case I have selected the USE of social capital for demonstrating its impacts
- Use of social capital
 - Measured by whether and how often household members turn to market, bureaucratic, associative, communal types of relations in their daily activities and when they are faced with major changes
- I have included education and HH size in the regression equation
 - Education: human capital (example of one of the more traditional measures in the economists' toolkit – plenty of research shows its importance)
 - HH Size: control for another of the contributors to income – the number of people in the HH. This gives us a better representation of the role of social capital alone
- Results:
 - Market-related social capital dominant impact – as expected for incomes
 - Bureaucratic and communal show a negative relationship
 - Bureaucratic: Most likely a reflection of social safety net in Canada (single parents, old age pensions, welfare) – raises the issue of direction of influence here: low incomes may mean people seek out bureaucratic supports
 - Communal: Similar possibilities – this time through family and friends
 - [Suggests the value of our work on the informal economy
 - Associative: positive – consistent with Putnam's work – that focuses primarily on associative measures for social capital
- Implications
 - Social capital makes an important contribution to income – over and above human capital
 - Not just associative social capital that have impacts on income
 - Policies directed to Associative capacity are likely to increase incomes as well
 - Opens up new opportunities for building capacity
 - Nature of the social relations and their impacts are different

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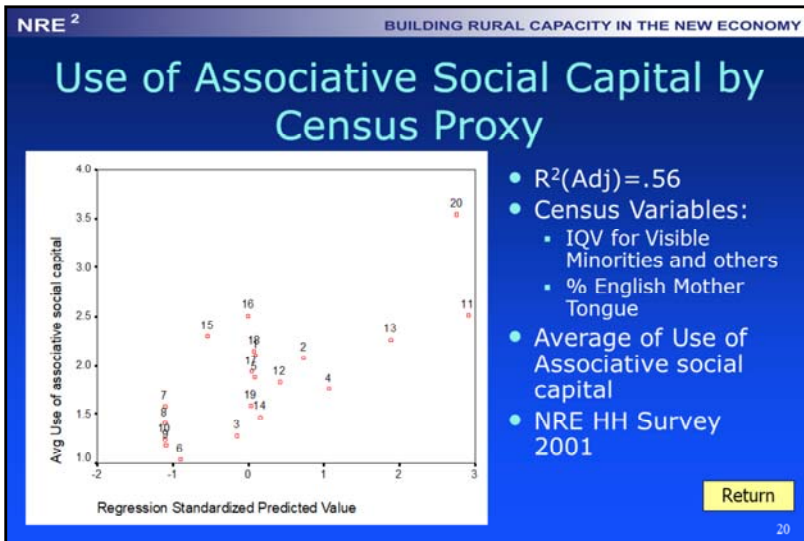
Census Proxies for Social Capital

	Total	Market	Bureau.	Assoc.	Comm.
LF Particip.	.45*	.74*			
Median HH Income	.66*	.81**		.52*	
% Gov't Transfers		-.73**			
% English MT	.58**		.70**	.55*	.60*
IQV Visible Minorities	.50*		.58**	.67**	

• (r) (N=19) * p<.05; ** p<.01
 • Average social capital by site (Source: NRE HH Survey 2001; Statistics Canada, Census 2001)

Next Return

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- Average of USE of SoKp by census proxies
- $R^2(\text{Adjusted}) = .56$
- St Err = .52
- Durbin-Watson = 1.36
- Constant = 1.33
- IQVMin: B = 4.79, Beta = .59
- % Engl MT: B = .006, Beta = .40

R2 (Adj)	.934	N=19
St ERR R2	.173	
Durbin-Watson	2.215	
Constant	.814	
	B	Beta
West or North (dummy)	1.244	.885
% Retail Trade	.0533	.538
IQV Visible minority	3.943	.488

NRE² BUILDING RURAL CAPACITY IN THE NEW ECONOMY

Perception vs. Behaviour-based Indicators of Social Cohesion

Return

	Market	Bureau	Assoc.	Comnl	Total
Community Cohesion	.10	.11	.25	.18	.24
Psychol. Cohesion	.09	.12	.25	.17	.24
Attract-iveness			.14	.08	.09
Neighbour-liness	.13	.08	.15	.20	.21

(r) All correlations significant at .01 level (2-tailed) Source: NRE HH survey 2001: 1991 respondents 21

Main points

- Correlation coefficients between social cohesion as measured by perception (S) and actual behaviour (S)
 - HH level
- 4 aspects of social cohesion based on perception
- Social cohesion based in 4 types of relations for behaviour
- Perception and behaviour not always the same
- Most research relies on perception, but seems weakly related to behaviour
- Potential problem for policy
 - Focus on perception alone may be ineffective in outcomes
 - Focus on perception limits options
 - Perception more sensitive to identity?
 - Perception less sensitive to incidents?
- We prefer to integrate behaviour-based since it is less susceptible to impression-management and identity issues
- But does it matter for outcomes?...

NRE² **BUILDING RURAL CAPACITY IN THE NEW ECONOMY**

Use of Social Capital by NRE Sample Frame Dimensions

	Global	Stable	Adjac.	Hi Cap.	Leading
Market	.18**	-.12**			.18**
Bureau.					
Assoc.	.05*	-.06**	-.06**		.17**
Comm.	.05*	-.05*		-.11**	
Total	.10**	-.10**	-.05*	-.05*	.16**

• (r) (N=1995) * p<.05; ** p<.01 (confirmed by ANOVA)
 • Use is measured at the site level (Source: NRE Site Profiles 2000)

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NRE² BUILDING RURAL CAPACITY IN THE NEW ECONOMY

Context Important for Transforming Assets into Outcomes (e.g. Income)

	Total	Local	Global	Stable	Fluct.	N.Adj	Metro Adj.	LoCap.	HiCap.
R ²	.37	.42	.35	.29	.43	.41	.31	.43	.35
Market	1	1	1	1	1	1	1	1	1
Educ	2	2	2	2	2	2	2	2	2
HH Size	3	3	4	4	3	4	3	5	3
Bureau.	4	4	6	3	5	6	4	6	4
Comm.	5	5	5	4	4	3	4	4	3
Assoc.	6	3	3	5	6	5	3	3	3

• Regression of HH Income on Social Capital, etc. under NRE Sample Frame conditions
 • Ranks based on standardized coefficients
 • Source: NRE HH Survey 2001 (1995 HHs)

Return • USE of social capital 23

- The context is important for the relationship between assets and outcomes
- We ran multiple regressions using the 4 types of social capital, education of the respondent, and household size for various conditions of the field sites – based on the NRE sample frame dimensions
- Results:
 - Column = regression equation organized by conditions
 - 1st column: total cases
 - Rank order
 - Variation in the relative explanatory power of the various conditions (cf. R²)
 - USE of Market Social Capital and education consistently important
 - This is what we would expect since the ability to operate in markets is important for incomes
 - Most shifts are in other types of social capital
 - (S) USE of Associative social capital
 - Important for income in Globally connected sites, Unimportant in Local Economies
 - (S) USE of Communal social capital
 - Important for income in Fluctuating economies, not in Stable economies
 - (S) USE of Associative and Communal social capital
 - Important for income in sites that are Not Adjacent to Metro areas, Unimportant for income in Adjacent sites
 - Important for income in Low Institutional Capacity sites; Unimportant in Hi Institutional capacity sites.
- Implications
 - General policies will have different effects in various places
 - Ability to function in different types of relations is important for different contexts
 - Strategies for capacity building should be different in different places
 - E.g. building associative capacity in global, stable, not adjacent, low institutional capacity sites will have greater impact on income that in other types of sites.
- We have the ability to do this for other outcomes:
 - Employment
 - Government transfers
 - Social cohesion