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THE IMPACT OF SOCIAL CAPITAL ON HEALTH

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Abstract

Theories, hypotheses and measures of social capital are reviewed here in order to determine the impact, or lack of impact, of this protean term on health. Three different approaches to social capital are considered: diffuse formal and informal networks; situational and instrumental networks; and social psychological trust. The paper shows how measures differ, and presents empirical results from measures developed through a special-purpose social capital survey in the Russian Federation. It tests the impact of varied social capital measures on self-assessed physical and emotional health. While Russia is far from Tocqueville's United States, so the latter country is unsuitable for generalizing about many developing and low income countries which are incompletely democratic and where formal organizations can be corrupt or untrustworthy, with the consequence that informal networks can be used as insulation against formal networks or to subvert them.

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Mortality statistics invariably include a bio-medical cause of death. But some causes of death, such as cirrhosis of the liver, accidental injuries, or cardiovascular diseases in middle-age, raise questions about other influences on health, including a broad range of social influences that are the subject of this report.

The idea that social cohesion influences the health of individuals has long been familiar and sometimes social relations have been incorporated under such labels as life styles or living conditions. In the past decade studies of social capital, however defined, have promoted the idea that it has positive effects on welfare in general (Coleman, 1990; Putnam, 1993; Blane et al., 1996; Lin, 2001), and health in particular. But many indicators of social capital, for example, being in employment or trusting other people, are not novel, and have already appeared in studies of the social causes of ill health.

Social capital is not a new phenomenon; networks for the production of goods and services are an inevitable feature of all societies, ancient or modern. But what makes a modern society distinctive is the predominance, in both the market and the state sectors, of social capital in the form of large, impersonal bureaucratic organizations operating according to the rule of law (Weber, 1968), such as IBM, commercial airlines, social security agencies and universities. Even though informal networks can supplement or at times substitute for formal bureaucratic organizations, in modern societies they are of much less importance than in a traditional or pre-modern society (cf. Polanyi, 1957; Rose, 1986).

But what is the role of social capital networks in an "anti-modern" society permeated by organizational failure, that is, formal organizations are numerous and important but often fail to operate impersonally, predictably and in accord with the rule of law? Is this paralleled by "social failure", that is, individuals displaying 'amoral familism' and refusing to cooperate? (cf. Banfield, 1958) If social capital networks exist, are they substitutes for discredited formal organizations? Or do they penetrate formal organizations to correct for their shortcomings or re-enforce "anti-modern" features by allocating goods and services through favouritism and bribery?

An anti-modern society is complex; formal organizations are an integral part of activities central to the lives of every household, to the economy and the polity. But these organizations fail to operate as in a modern society. Instead of responding to signals from prices and laws, rules are bent or broken by politics, bribes and personal contacts. The system is semi-transparent or opaque rather than transparent and the rule of law is an excuse for rigidity or rent-seeking rather than a guide to conduct. The result is uncertainty that clouds calculations and expectations. An anti-modern system can be effective, for example, putting a man on the moon or developing nuclear weapons, but its output is achieved in spite of the chronic inefficiencies of the system.

In terms of the physical capital and the human capital of its population, Russia appears to be a modern society. Nearly everyone in the labour force has at least a secondary education, three-quarters of the population is urban, and telecommunication and transport link a population dispersed across eleven time zones. To describe post-Communist societies as in "transition" focuses much more attention on the goal than on the point of origin. However, state and market remain influenced by the anti-modern Soviet legacy. Ideological mobilization by the party-state drove individuals to seek refuge in private and unofficial networks. Russians created both a repertoire of 'second economies' and a 'second polity' (Grossman, 1977; Gitelman, 1984: 241), using social networks to insulate themselves from intrusive organizations and when forced to engage, to exploit formal organizations. The networks were not destroyed by the collapse of the Soviet Union; to a substantial degree, Russians continue to rely on a variety of "unmodern" networks to get by amidst the turbulence of transformation. However, the persistence of such networks is a formidable barrier to Russia's transition from an anti-modern to a modern society.

Understanding societies distant from Weber's ideal-type modern society or Putnam's (1993) civic democracy is necessary if theories of social capital are to be relevant to the promotion of welfare in countries in transition, and particularly post-Communist countries. Russian history offers many answers to this question. The "otherness" of Russian history is a recurring theme, and in Tsarist times Russian elites were often proud of

being different from modernizing European societies (Wolff, 1994; Neumann, 1996). Sovietologists have simultaneously stressed the distinctiveness of the Soviet system. Jowitt (1992: 128f) described it as initially a unique amalgam of ideological impersonalism and charismatic Leninist leadership, evolving into a corrupt clientelistic dictatorship as its ideological impetus became exhausted. The Polish economist Jan Winiecki (1988) described the Soviet system as 'pseudo-modern' because of its reliance on non-market mechanism. Martin Malia (Z, 1990: 298ff) described the contrast between ideology and reality as creating a "surreal" society. But such negative labels do not tell us what the Soviet system was at its height, that is, it was actively "anti-modern" (Rose, 1999).

Russia is particularly apt for investigating the impact of social capital on health, because the Soviet system of health care was collectivist rather than individualist, as in the Anglo-American tradition, or in the German civil society or sozialmarkt tradition. As Cockerham (1999: 78) emphasizes, 'The prevailing policy orientation under socialism was to invest the responsibility for health in the state rather than the individual'. Whereas in OECD countries there is an ongoing dialogue about the relative importance of the state's responsibility for promoting health as against that of individual actions and life styles, in the Soviet system, 'the state, in fact, assumed responsibility for health and individuals were relegated to a more or less passive role'.

However, long before the collapse of the Soviet system, Russian health was not good by comparison with other Communist bloc countries and even poorer by comparison with such Central European countries as Austria and the Federal Republic of Germany. Even when there was progress, for example, a fall in infant mortality and a rise in life expectancy, the rate of progress was lower than in European countries (Rose, 1999a). As Field and Twigg (2000: 5) emphasize, the present crisis 'finds its root as far back as the 1960s'. The term *katastroika* was coined by A. Zinoviev during the *perestroika* period of the 1980s to emphasize the dangers of increased mortality rates.

The collapse of the Soviet Union in 1991, and with it many laws and norms governing individual behaviour, was far more pervasive than the social crises that Durkheim (1995: 241ff) cited as causes of *anomie*. Mortality

statistics for the Russian Federation are consistent with this interpretation, for age-specific mortality, especially among men, is increasing in virtually unprecedented ways (see Eberstadt, 1999).

A top down perspective on Soviet society is deficient, because it assumes that individual Russians followed the lead of the party-state. In reaction to Communist mobilization, however, many citizens sought to insulate themselves from the intrusive claims of the state. A character in a novel by Vladimir Dudintsev describes Russians as living like two persons in one body, the "visible" person, saying and doing what the state commands, and the "hidden" person, thinking and doing what he wants in the privacy of the home or among a trusted circle of friends" (quoted in White, 1979). Ordinary Russians at the base of society formed strong informal face-to-face networks with friends, relatives and people at work to insulate themselves from the demands of a mobilizational party-state. The result was not social cohesion but an "hour-glass society" in which those at the bottom of Russian society sought to constrict links with state organizations as protection against integration in a repressive regime with a totalitarian vocation (Shlapentokh, 1989; Rose, 1995).

Shifting attention from population means in aggregate statistics to frequency distributions in sample surveys highlights an often overlooked fact: some Russians are healthier than others. To what extent does the health of Russians vary depending on their involvement or exclusion from networks of social capital rather than on conventional human capital influences, such as education or income? To answer this question, we need individual-level data about Russians in good health as well as about those most likely to be threatened by premature mortality, and we also need a repertoire of measures of social capital.

I CONTRASTING CONCEPTS, THEORIES AND MEASURES

Social capital is here defined as the stock of formal or informal social networks that individuals use to produce or allocate goods and services. In common with other definitions, this emphasizes that social capital is about recurring relationships between individuals.

Social capital as both informal and formal networks. Informal social networks are face-to-face relationships between a limited number of

individuals who know each other and are bound together by kinship, friendship or propinquity. They are "institutions" in the sociological sense of having patterned and recurring interaction. Lacking legal recognition, fulltime officials, written rules and their own funds, they are not formal organizations. Even if networks have a formal identity, such as a choir or a rural cooperative, face-to-face networks tend to be horizontal and diffuse, and an individual's reputation for helpful cooperation more important than cash payments and bureaucratic regulations. The characteristic output of informal networks is a small-scale do-it-yourself service such as help in house repair or child care or providing information and contacts to deal with an unfamiliar situation. Most outputs are unrecorded in national income accounts. Many are incalculable, being based on affection or obligation within a family, extended family or friendship network (see Rose et al., 1998: 91ff).

Formal organizations are rule-bound and bureaucratic, they have a legal personality, and get their revenue from the market, the state or both. A formal organization can have individuals as its members, for example, a professional association of doctors, or its members can be organizations, for example, an association of hospitals. However, the links between actual individuals and organizations of organizations are intermediated many times for example, the relation between the managers of a joint stock firm and its nominal owners. Formal organizations are a necessary part of a modern society, for it requires impersonal bureaucratic organizations of state and market that can routinely produce complex goods such as automobiles and services such as university education (cf. Woolcock, 1998: 169ff). The literature on corporatist cooperation between government ministries, enterprise associations and trade unions emphasizes the dominance of formal organizations in a modern society. Individuals are mobilized as followers and joining an association may be a condition of operating a business or practising a trade. Schmitter (1995: 310) goes so far as to argue, 'Organizations are becoming citizens alongside, if not in the place of, individuals'.

There are many links between informal and formal organizations, both horizontal (a family books a holiday from a travel organization) or vertical (individuals can have informal relations in their union branch,

which is affiliated to the district and regional levels and a distant national headquarters). Although a leading institutionalist, Douglass North (1990: 36) has argued:

In the modern Western world, we think of life and the economy as being ordered by formal laws and property rights. Yet formal rules in even the most developed country make up a small (although very important) part of the sum of constraints that shape choices. In our daily interactions with others, whether within the family, in external social relations or in business activities, the governing structure is overwhelmingly defined by codes of conduct, norms of behaviour, and conventions.

However, a formal organization cannot behave like individuals interacting informally, for its employees are officials of a rule-bound formal organization. An informal network has fewer resources and rules but more flexibility and, in the literal sense, more sympathy than a formal organization.

The relationship between informal social capital networks and formal organizations is contingent. Informal networks can have positive consequences within formal organizations, and even more in the interstices between formal organizations, as in Edmund Burke's statement that soldiers fight for their platoon rather than for a bureaucratic military organization. But in an anti-modern society such as the Soviet Union, informal and formal networks often contradicted each other. Uncertainties arising from the behaviour of formal organizations encouraged the formation of informal horizontal networks that individuals could use to insulate themselves from exploitative organizations. When individuals were caught up in activities of formal organizations, they could "de-bureaucratize" their relations, relying on personal contacts, barter or bribes to get what they wanted (see Ledeneva, 1998). Mutual cooperation was based on the morality of face-to-face groups that Max Weber characterized as Binnenmoral; the complement was 'outsider morals' (Aussenmoral) that justified the exploitation of formal organizations. Russia today continues to suffer from a "missing middle" of organizations linking informal grass roots networks and modern organizations, and the gap is sometimes filled by anti-modern enterprises run by ex-nomenklatura officials or by Mafiya organizations (cf. (Shlapentokh, 1989: 4ff; Hedlund and Sundström, 1996).

Social capital as trust. In Inglehart's (1997: 188) phrase, 'a culture of trust and tolerance in which extensive networks of voluntary associations emerge'. Networks are a consequence of people trusting each other rather than trust emerging as a byproduct of association (but see Dasgupta, 1988). People who trust each other interact to form associations in situations ranging from choirs and sports groups to the work place and thereby become more trusting. Inglehart's definition is cited because he avoids the mistake of conflating different elements in the causal chain, as Putnam (1997: 31) does in defining social capital as 'features of social life--networks, norms and trust--that facilitate cooperation and coordination for mutual benefit', thus making it impossible to use the term to construct a cause and effect model of the relation between networks, norms and trust.

In Inglehart's view, 'social capital [that is, trust] plays a crucial role in both political and economic cooperation'. Social capital not only spills over from one situation to another, but also "spills up", creating large-scale representative institutions such as political parties important in Making Democracy Work, the title of Putnam's pioneering re-interpretation of Italian political culture; it also encourages the formation of large formal organizations of state and market.

Because social capital is seen as a generalized predisposition to cooperation and trust, this leads to the empirical prediction: *There is consistency in networks chosen by an individual from one situation to another, even though there may be a wide dispersion of social capital between individuals within a society*. It is deemed possible to measure an individual's quantum of social capital by assessing an individual's disposition to trust other people or major institutions of society or adding up an individual's participation in voluntary associations. Research may then focus on why some people are more trusting than others or on why some cultures are more trusting than others. Francis Fukuyama's (1995) study of trust has a Durkheimian emphasis on culture as the source of trust and cooperation. He cites cross-cultural differences in trusting social capital to explain cross-national differences in forms of economic organization, specifically, a predisposition toward firms based on family and kinship in societies such as France, as against those in which there are strong ties to impersonal corporations, for example Japan. Empirically, the culture theory

hypothesizes: *homogeneity in social capital between individuals within a society, including consistency from one situation to another.*

In data-rich OECD countries, the debate about whether trusting social capital is increasing or decreasing is being conducted with fragmentary evidence collected for other purposes, (cf. Ladd, 1996; Jackman and Miller, 1998; Putnam, 2000; Pharr and Putnam, 2000). Data about membership in organizations is also cited by disputants, but the validity of membership figures as indicators of social capital or, for that matter, involvement in organizations, is challenged (see e.g. Baumgartner and Walker, 1988; Fukuyama, 1997: 127-31).

Post-Communist regimes provide a rich context in which to explore the sources of interpersonal trust and trust in political institutions. Life in a Communist regime forced citizens to rely, to an unusual extent, on interpersonal relationships and connections to provide for their material and emotional needs and to protect themselves from an intrusive and repressive state (see, e.g., Di Francesco and Gitelman, 1984; Hankiss, 1990; Wedel, 1992). Although post-Communist regimes have developed new institutions that differ substantially from those in place ten years ago, the new institutions vary in the extent to which their performance warrants popular trust.

Assessing trust requires survey data about interpersonal and institutional trust. Survey data from the fifth New Democracies Barometer (NDB V) in 1998, organized by the Paul Lazarsfeld Society, Vienna, and the seventh New Russia Barometer (NRB VII) in 1998, organized by the Centre for the Study of Public Policy at the University of Strathclyde provide this. NDB interviews were conducted between January and May 1998 in seven Central and East European countries--Bulgaria, the Czech Republic, Slovakia, Hungary, Poland, Romania and Slovenia--and in two successor states of the former Soviet Union, Belarus and Ukraine. Face-to-face interviews were conducted by professional survey firms using national probability samples of approximately 1000 in each country, and 2000 in Russia (for further details, see Rose, 1998; Rose and Haerpfer, 1998; and www.cspp.strath.ac.uk). Survey data from ten countries has been pooled in a single multinational file of 11,499 respondents.

To measure trust in institutions, the NDB surveys ask respondents: *There are many different institutions in this country, for example, the government, courts, police, civil servants. Please show me on this 7-point scale, where 1 represents great distrust and 7 represents great trust, how much is your personal trust in each of the following institutions.* The list included: political parties, courts, police, civil servants, government, the military, Parliament, churches, trade unions, television and radio, the press, private enterprise, the President of the country and the Prime Minister. People were then asked, with the same response alternatives: *How much do you trust most people you meet?* In Russia, the NRB questions on institutional trust named a slightly different set of institutions. Measuring interpersonal trust in the same format and with the same metric as institutional trust also avoids the confusion that can result from using different language and metrics for the two different types of trust (see, Inglehart et al., 1998: v94, 289).

Across the ten post-Communist societies, public reactions to the new social and political institutions range from skepticism (the midpoint on the seven-point trust scale) to outright distrust (Table 1.1). The median citizen in post-Communist societies actively distrusts five of the institutions and is skeptical about the remaining six. Distrust is greatest for political institutions, especially parliaments and parties, which are actively distrusted by 59 and 69 percent of citizens respectively. Across all institutions an average of 31 percent of respondents express positive trust, 22 percent are skeptical and 47 percent are distrustful. While a healthy skepticism facilitates democratic society more than blind trust (Mishler and Rose, 1997), the overall pattern in post-Communist countries is one of severe skepticism bordering on outright distrust of current institutions--indicating a low level of social capital in post-Communist countries.

Interpersonal trust is higher overall than popular trust in institutions in all of the countries except Romania, indirectly supporting the cultural hypothesis that trust in people is a leading indicator on institutional trust. In post-Communist societies, this means that individuals are relatively less distrustful. Less than half of all respondents express positive trust toward others they meet; more than a quarter are distrustful and the median citizen is sceptical.

Table 1.1 TRUST IN INSTITUTIONS AND PEOPLE

Q. There are many different institutions in this country, for example, the government, courts, police, civil servants. Please show me on this 7-point scale, where 1 represents great distrust and 7 represents great trust, how much is your personal trust in each of the following institutions.

	% Trusting (5-7 on Trust)	% Neutral (4 on Trust)	% Distrusting (1-3 on Trust)	Mean (7 pt scale)
Parties	12	20	69	2.70
Parliament	21	20	59	3.12
Trade Unions	22	24	54	3.25
Private Enterprise	25	24	51	3.42
Police	28	23	50	3.48
Courts	28	23	48	3.53
Prime Minister/ President	35	19	46	3.68
Churches	43	18	39	4.08
Press	37	27	36	3.97
Television & Radio	39	26	35	4.03
Military	46	23	31	4.29
Most People	49	25	26	4.39

Notes: Percentages are based on nationwide surveys in each of ten 10 post-Communist countries: Bulgaria, The Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia, Romania, Belarus, Russia, and Ukraine. The total number of weighted responses for each institution varies from 9907-9993.

Source: Paul Lazarsfeld Society, Vienna, New Democracies Barometer V (1998) and Centre for the Study of Public Policy, New Russia Barometer VII (1998).

Both cultural and institutional theories assume the existence of a generalized sense of trust or distrust that holds across the different institutions of the state. If trust spills up from individuals to institutions, it should do so equally for all institutions. A principal components analysis of trust in the eleven civil and political institutions confirms that trust or distrust in institutions tends to be generalized across institutions (Table 1.2). Although the analysis produces two components or factors with eigenvalues greater than 1.0, the first factor clearly dominates, accounting for more than 40 percent of the total variance in trust, nearly four times the variance explained by the second factor. Moreover, consistent with the interpretation of this as a dimension of overall institutional trust, ten of the eleven institutions have loadings greater than .60 on this dimension. A scree test, conventionally used to judge dimensionality, also clearly points to the superiority of a one factor solution. When a second factor is extracted and the two are rotated orthogonally, the first rotated factor clearly is a measure of trust in the institutions of the state and the second and much weaker factor reflects trust in civil institutions including the press and media.

Social capital as instrumental and situational networks. A political economy approach to social capital, is offered by James S. Coleman (1990: 302), who defines Social capital in instrumental and situational terms. Individuals use networks in order to produce a tangible flow of goods and services, such as minding another person's child or finding a job. Because social capital is instrumental, it is an endogenous feature of social relations. However, the type of network needed varies from one situation to another. The type of social capital required to get help at home when ill is informal, but to gain admission to hospital involves networking with officials in a large bureaucratic organization. Ignoring rules to do favours for friends or taking a bribe in return for allocating public property illustrate the use of networks to break rules that are central to formal organizations in a modern society.

Empirically, situational theories of social capital predict: *an individual relies on a heterogeneous set of social capital networks, depending on the incentives and constraints affecting how things can get done in a given situation.* Because of the variability of networks and users

Table 1.2 DIMENSIONS OF INSTITUTIONAL TRUST: ONE FACTOR AND TWO FACTOR MODELS

Variable	One Factor Model	Two Factor Model	
	Single Factor	Rotated Factor 1	Rotated Factor 2
Parliament	.70	.74	.19
Prime Minister/President	.64	.60	.29
Courts	.69	.72	.18
Police	.69	.71	.21
Parties	.61	.67	.13
Military	.61	.61	.22
Press	.69	.17	.89
Television & Radio	.67	.15	.90
Private Enterprise	.61	.34	.50
Trade Unions	.61	.40	.46
Churches	.45	.37	.26
Eigenvalue	4.43	4.43	1.20
Percentage of Variance	40.3	40.3	10.9

Source: As in Table 1.1.

from one situation to another, social capital cannot be reduced to a single unit of account and aggregated into a summary statistic characterizing the whole of society. In short, networks that help maintain health may not secure employment, and vice versa.

Even in an anti-modern society there is no escape from becoming involved with organizations to obtain education, health care, housing and employment. What do Russians do? If social capital networks are culturally determined, a single anecdote about a society would suffice. If social capital is based on individual trust, then assessing the disposition of

individuals on this score would be sufficient to understand networks. However, even if every individual behaved the same within a culture or each individual relied on a generalizable stock of trust in different situations, this can only be demonstrated by systematically collecting evidence about behaviour in different situations.

The 1998 New Russia Barometer of the Centre for the Study of Public Policy, University of Strathclyde, had a questionnaire that was specially designed to explore in detail different situations in which people might make instrumental use of social capital (for questions and answers, see Rose, 1998). In selecting situations to ask about, the first criterion was that they should affect a majority of households rather than be minority interests such as singing in a choir or bowling--and that the situations should be relevant across many countries and cultures. The situations asked about include concerns of every adult, whatever their economic status--food, housing, protection from crime on the streets and at home, income security, health, and governance. In addition, questions were asked about situations involving a substantial portion of the population: care and education of children for the 44 percent with children; employment-related networks for those in the labour force; and getting paid a pension for those in retirement.

Secondly, to determine the extent to which Russians can or cannot rely on formal organizations to operate as in a modern society, the questionnaire described situations in which formal organizations are major sources for the delivery of goods and services, such as hospital treatment, education and employment. Asking about the delivery of goods and services that the respondent, family members or friends and neighbours use provides much evidence with greater face validity than questions about trust in distant national institutions for which television and press are the primary media of information.

Thirdly, in each situation the focus was on the production of particular goods or services, such as treatment of ill health or injury; finding a job; or on the allocation or misallocation of such resources as admission to a university. The question left open whether or not an individual relied on a modern organization to produce what was required, or expected to turn to one or another informal network. Giving proper

scope to the role of formal networks avoids the anthropological fallacy of treating every relation as "outside" modern structures. It also avoids the formalist fallacy of assuming that organizations actually represent the people on whose behalf they claim to speak.¹

In the ideal-type modern society, people do not need a repertoire of tactics for dealing with formal organizations; bureaucratic organizations are predictably expected to deliver goods and services to individuals as citizens and customers. To invoke Weber, modern organizations operate like a vending machine: a person inserts an entitlement or money and the expected good or service is delivered. In a modern society we do not think it unusual if electricity is supplied without interruption and regularly billed, an airline ticket booked by phone is ready to pick up at the airport, or a pension is paid routinely each month. If people use informal networks this choice is not a vote of no confidence in state and market organizations.

But what if modern organizations do not work in the ideal-type way? Given the centrality of money incomes in a modern society, the inability of organizations to pay wages or a pension due is an appropriate indicator of the extent of organizational failure in Russia. The Social Capital survey found that less than two in five Russians routinely receive the wage or pension to which they are entitled. Wages are more likely to be paid late to employees of such public sector organizations as the military, education and state enterprises than to employees in the private sector. Moreover, pensions, a state responsibility that is easy to routinize in a modern society, are even more likely to be paid late than wages.

Confronted with organizational failure, individuals have a choice between a variety of alternatives. Informal networks can substitute for the

¹ The Social Capital survey found that in Russia, 80 to 90 percent do not belong to any voluntary association. Less than 5 percent of Russians said they belong to a sports, music or arts club, housing or neighbourhood association or a political party (Rose, 1998: 60). Altogether, 91 percent are not members of any of the face-to-face organizations often described as the building blocks of a civic democracy. If associational involvement is expanded to include those attending church at least once a month (4 percent) and union members who trust local union leaders to represent their interests (8 percent), the proportion of Russians completely outside institutions of civil society remains very high, 79 percent.

failure of modern bureaucratic organizations. Additional tactics include trying to personalize relations with impersonal bureaucrats or using connections or bribery in an attempt to get bureaucrats to violate rules; or fatalistically accepting that nothing can be done. In each module of the questionnaire, respondents were asked a series of questions about what they had done or would do or advise a friend to do to get something done in a familiar situation--including reliance on an organization to do what it is supposed to. For each situation, a multiplicity of tactics was offered. The answers show which network or networks Russians rely on and the extent to which tactics vary with the situation (for illustrations, see Table 1.3)²

In almost every situation, a majority of Russians did not expect to get things done with vending machine efficiency by the nominally modern organizations of their society. The only set of organizations that a majority expect to work as they should are food shops; 74 percent think they charge prices as marked, and go to shops regularly. While this may appear obvious in a modern society, in Russia this is a novelty, for in the command economy food stores allocated goods by a combination of queuing, the black market and arbitrary fiat. The great majority of Russians have sufficient money to pick and choose their food in the market place and stores now regularly have ample stocks of food to sell. However, when larger sums are involved, the proportion able to turn to the market falls precipitously. Less than one in three expect to have enough money to consider buying a house and only one in six reckon they could secure a bank loan.

Individuals can exit from dealing with modern organizations by turning to a non-monetized informal network. Having experienced chronic food shortages in shops of the old regime, four-fifths of Russian households, including a big majority of city dwellers, continue to grow

² A similar approach, described as 'working the output side', was used in the Soviet Interview Project to study behaviour of emigrants from the late Brezhnev period (see DiFranceisco and Gitelman, 1984: 611). The logic is parallel to Greif's (1994: 915) emphasis on the importance of understanding beliefs that represent 'individual's expectations with respect to actions that others will take in various contingencies', a situational approach phrased in cultural language.

Table 1.3 ALTERNATIVE TACTICS FOR GETTING THINGS DONE

	<u>Involved</u> %
MODERN ORGANIZATIONS WORK	
<u>Public sector allocates by law</u>	
Police will help protect house from burglary	43%
Social security office will pay entitlement if you claim	35%
<u>Market allocates to paying customers</u>	
Buy a flat if it is needed	30%
Can borrow a week's wage from bank	16%
INFORMAL ALTERNATIVES	
<u>Non-monetized production</u>	
Growing food	81%
Can borrow a week's wage from a friend	66%
PERSONALIZE	
<u>Beg or cajole officials controlling allocation</u>	
Keep demanding action at social security office to get paid	32%
Beg officials to admit person to hospital	22%
ANTI-MODERN	
<u>Re-allocate in contravention of the rules</u>	
Use connections to get a subsidized flat	24%
Pay cash to doctor on the side	23%
PASSIVE, SOCIALLY EXCLUDED	
<u>Nothing I can do to:</u>	
Get into hospital quickly	16%
Get pension paid on time (pensioners only)	24%

Source: New Russia Barometer Survey VII (1998). Fieldwork by VCIOM; number of respondents: 1,904.

some food for themselves (cf. Rose and Tikhomirov, 1993). While only one in four Russians has any savings and a big majority of the unemployed do not receive a state unemployment benefit, most Russians can draw on informal networks of social capital for cash. A total of 66 percent report that they could borrow a week's wages or pension from a friend or relative. In

a developing society such informal networks can be described as pre-modern, but in the Russian context they are evidence of "de-modernization", means of avoiding the consequences of the failings of large bureaucratic organizations. Even though such activities do not turn up in national income accounts, they are nonetheless real to those who rely on them.

When a formal organization does not deliver and an individual cannot substitute the market or an informal network, three different types of network can be invoked to "de-bureaucratize" dealings with an organization, that is, to find a way to make it produce goods and services. One option is to try to personalize a relationship, begging or cajoling officials to provide what is wanted. Since the great majority of Russians do not expect to get paid an unemployment benefit when they file a claim, the most common tactic is to personalize the claim, pestering officials until it is paid. This is not a retreat into pre-modern informal networks but a stressful attempt to compensate for the inefficiencies of bureaucratic organizations by taking a step backwards into a pre-modern relationship in which individuals pleaded for benefits.

A second option encouraged by Soviet life is to adopt anti-modern tactics. The Social Capital survey found that 68 percent thought that to get anything done by a public agency in Soviet times you had to know people in the party. It was even more widely assumed that you had to have connections, a network of friends extending to friends of friends or even friends of friends of friends. The Russian concept of blat usually refers to using connections to mis-allocate benefits, as they are invoked to get an official to "bend" or break rules (cf. Berliner, 1957; 182ff; Ledeneva, 1998: 37ff). Connections, that is, asking for favours on the basis of being part of a "circle" (svoim) or network is also found today. For example, 24 percent endorse connections as the way to get a government-subsidized flat.

A third option is corruption, the payment of cash to get officials to break rules to the benefit of a recipient. Taxation provides an excellent example, for the capacity to collect taxes is a defining characteristic of the modern state. The great majority of Russians see taxation in anti-modern terms. Among employed persons, only 41 percent say that taxes are deducted when their employer pays wages. A majority, 56 percent, say that

there is no need to pay taxes if you don't want to do so, for the government will never find out, and 77 percent believe that a cash payment to a tax official would enable a person to evade payment of taxes claimed. Altogether, five-sixths of Russians think that taxes can be evaded; they differ only in whether the best tactic is not to pay at all or that a "tip" to a tax official is needed to avoid legal obligations.

The assumption that "everybody is doing it", whatever "it" is, ignores the fact that resources for getting things done are not equally distributed throughout a society, and networks are exclusive as well as inclusive. The concept of social exclusion (Room, 1995) characterizes individuals lacking networks to secure everyday goods and services. As an indicator of exclusion, for each situation the Social Capital survey offered the statement: Nothing can be done. By this standard, a big majority of Russians are not socially excluded, that is, unable to draw on some form of social capital when problems arise in everyday situations. The majority able to rely on at least one network to get things done is more than 90 percent for visiting a doctor and protecting their house from thieves, and more than 75 percent for arranging hospital treatment for a painful disease or finding a new job.

In every situation, a variety of networks are applicable--and Russians differ in their choice. Whatever the situation, some people will rely on the public bureaucracy to deliver goods and services, while others rely on informal do-it-yourself cooperation, personalistic cajoling of bureaucrats or anti-modern bending or breaking of rules, and if the situation makes it feasible, some turn to the market.

Organizational failure in Russia is not a sign that nothing works--but that organizations do not work as in a modern society. When a formal organization fails to operate routinely, individuals can invoke a variety of social capital networks to get things done. The networks vary from one situation to another, often for reasons related to the structure of the situation. For example, there is far more scope for informal cooperation in house repair than in hospital treatment; and one can grow vegetables at a *dacha* but not perform major medical operations there.

Redundant networks to combat uncertainty. While Russians clearly differ in tactics they pursue in any one situation, there is no reason to expect that this is due to an exogenous given such as a generalized disposition to trust

or distrust other people. In fact, it is unreasonable to expect an individual to rely on only one tactic in all situations, since there are incentives and opportunities for an individual to pursue different tactics in different situations. A person can also invoke more than one network to get something done.

Uncertainty is the bane of an anti-modern society. The presence of formal organizations is evidence that goods and services can be produced, but their infirmities are a warning that they will not be provided with the automaticity of a vending machine. In such circumstances people can rely on the logic of redundancy, having multiple networks so that if one fails another can be invoked. (cf. Burt, 1992: 17ff). Even if redundancy appears inefficient, it can nonetheless be effective, ensuring that by one means or another something will get done. In effect, the inefficiencies of formal organizations externalize onto individuals the effort required to obtain what one wants.

A classic example of redundancy is job search; people can look for work by a multiplicity of means. Economic transformation has made Russians insecure; more than three-fifths in employment worry about losing their job. Yet these anxieties are balanced by confidence in being able to find another job; almost two-thirds think they could do so. Redundancy contributes to this confidence. Four-fifths have some idea of what they would do to find a job and a majority can call on at least two different networks in a job search. The alternatives, and the frequency with which they are named, are:

Informal networks: Ask friends, 50%; family, 11%.

Market networks: Approach employers directly, 33%; read help wanted advertisements, 23%; move to another city, 3%.

Public organization: Go to an employment bureau, 19%.

Anti-modern: Offer a payment to the manager, 1%.

Excluded: Don't know, 20%.

Multiple networks are instrumental in satisficing, that is, trying a number of different ways of getting something done until satisfaction produced (Simon, 1997: 421ff). Health care provides a good illustration of a satisficing use of networks, since what is needed changes radically with the physical intensity of discomfort. In the past year, 42 percent of Russians

had no need to invoke any health care network, since they had not felt ill. Of those who did feel ill at some point in time, a third did not think it necessary to visit a doctor, staying home and treating their aches with a home remedy. If medical treatment was required, seven-eighths say they would rely on state services, a clinic near their home or connected with their place of work. Only five percent said they would use connections to get a doctor, and three percent would pay for private treatment. Only one in eight of those who went to a doctor for treatment said that they had to make a side payment for this notionally free service.

When the level of dissatisfaction rises, few Russians accept the bureaucratic rule: Wait your turn. When asked what a person with a painful disease should do if a hospital says that treatment will not be available for some months, only one in six say nothing can be done. The most frequently cited tactic for queue jumping is anti-modern; using connections to get hospital treatment promptly is endorsed by 44 percent and offering a tip to officials by 23 percent. The proportion ready to buy a "free" service under the table is greater than the fifth who would turn to the market to buy private treatment legally. A begging personal appeal to officials was endorsed by 22 percent; it can be tried at no expense. The tactics endorsed are not mutually exclusive: a person in pain could proceed sequentially, first begging a hospital to speed things up, then turning to connections, and if that did not work offer a cash payment. Only if all three tactics failed would a person be left with the stark choice of waiting in pain or borrowing the cash to pay for expensive private treatment.

While the multiplicity of influences on welfare may frustrate academic advocates of reductionist theories, they help ordinary Russians cope with the upheavals of transformation, because multiple causation offers multiple opportunities. A Russian need not rely on a single form of capital. Instead, people have a portfolio of resources--and the opening up of society by the collapse of the Soviet system has increased this. When the early 1992 NRB survey asked individuals which economic activities were most important for their household, 35 percent said they relied solely on their job in the official economy. By 1998 only 14 percent depended solely on the modern first economy.

The great majority of Russians have a portfolio of social capital

networks combining different types of resources (cf. Rose, 1993; 1998: 27). The commonest portfolio is defensive; a person tries a modern organization and, if this fails, falls back on informal social networks. The portfolio is defensive because it is a form of retreat or insulation from modern society;. As long as do-it-yourself informal networks suffice, a person need not be anxious about the shortcomings of the country's formal organizations. Such networks may be adequate for dealing with minor illnesses but not for major problems. An enterprising person can combine modern market and anti-modern networks, getting some things done by buying them in the market, while achieving other goals by buying services of officials in government agencies or using connections. There is a middle class with a significant amount of disposable income; in 1998 a total of 37 percent reported having a video cassette recorder, a pre-eminent hard currency consumer durable. The use of connections can be influenced by fortuitous ties; the occupations of relatives and relatives by marriage, neighbours, and so forth. Nearly everyone will have connections in some situations but not in others. In an anti-modern society, vulnerability is greatest when the only network in an individual's portfolio is entitlement to goods and services of public sector organizations, since these cannot be depended upon to deliver routinely. When organizations fail, the vulnerable are effectively pushed into the ranks of the socially excluded. Social exclusion tends to be situation specific. While the great majority of Russians lack a network in a few situations, very few are consistently without any network to get things done. Across ten different situations, only 18 percent of Russians say that nothing can be done in a majority of situations and 4 percent feel excluded in as many as eight situations.

II RUSSIA: CONTEXT AND HYPOTHESES

A legacy of anti-modern social capital. The first modern societies, such as bureaucratic Prussia and England in Victorian times, did not have automobiles, airplanes, large numbers of university graduates or claims to democracy. However, countries such as Imperial and bureaucratic Prussia could create a modern state by governing through the rule of law, stipulating rights for individuals and civil society institutions, securing property and contracts, and predictably delivering public policies.

To understand the condition of Russians in a society in transition, we must know where it is coming from. The founders of the Soviet Union sought to transform Russian society--but the goal was not that of creating a modern *Rechtsstaat* of Weberian bureaucrats. The goal was a Marxist-Leninist society in which the new Soviet man and woman would be totally integrated in a new type of civilization. Formal organizations abounded under the leadership of the Communist Party of the Soviet Union, aptly described as an "organizational weapon" (Selznick, 1952). Informal networks existed, but the pervasive politicization of life imposed constraints and introduced risks about what individuals did in private, lest they be accused of actions that could constitute a crime against the Soviet state. Even though the Communist goal was not realized as intended, great changes occurred in Russian life. Writing nearly a half century after the Russian Revolution, Alec Nove (1975: 626) aptly noted, "We may be facing a qualitatively new phenomenon for which our customary categories (whether derived from Marx or from Parsons) may require substantial modification".

In response to the Soviet state, individuals had two alternatives--they could retreat into "pre-modern" forms of behaviour out of reach of institutions of the state, engage in anti-modern behaviour that ignored laws and procedures conventional in a modern society, or engage in both as opportunities arose. At the elite level, members of the *nomenklatura* enjoyed favours and dispensations well above the entitlements of ordinary Russians. The pathologies of a planned economy meant that factory managers needed the social capital networks of fixers (*tolkachi*) to obtain goods and services that were not otherwise available and to secure acceptance of documents stating that production norms of the plan had been fulfilled by hook or by crook (cf. Berliner, 1957; Granick, 1960; Gregory, 1990). Individuals turned to friends to provide goods and services that were not available through state or market channels. Urban households grew food for their own consumption as a hedge against the pathologies of collectivist agriculture. While this was not illegal, it was a massive expression of no confidence in a system of food production that was based neither on peasants nor on modern markets.

In the Soviet system, total welfare in the family was the sum of what

could be obtained from a multiplicity of "second" economies that Katsenelinboigen (1978) has aptly characterized as a "rainbow-coloured" system, since the methods for producing or getting goods and services shaded into each other; they were interdependent rather than separate (see also Grossman, 1977). Ofer and Vinokur (1992: p.v) conclude from a study of Russian life in the 1970s that Russian behaviour that may appear peculiar to Westerners can be considered rational--once one takes into account the 'economic and other constraints' of that society. A leading scholar of the Soviet era, Archie Brown (1999: 6), suggests that Russia is so different from late developing countries such as Portugal or Korea that it has a fourth world rather than a third world point of origin.

Hypotheses about networks in Russia today. Theories of the persistence of "Muscovite folkways" from Tsarist through Soviet times (Keenan, 1986) imply that pre-modern norms that withstood Communist pressures will remain important in post-Soviet Russia. Socialization theories that emphasize the importance of learning norms in early life (see Eckstein, 1998: 12) predict little change in Russia today, for every adult experienced intensive early socialization in the Soviet Union and the median adult was born not long after Brezhnev took power. What was learned was not what the party propagated but how to insulate the family from the stresses imposed by the state (Shlapentokh, 1989). Informal networks formed for survival or advancement could be pre-modern, anti-modern or both.

Yet theories of continuity cannot ignore great discontinuities that directly or indirectly affect every Russian today: the break up of the Soviet Union, the Communist Party's loss of its monopoly of power, and the collapse of the command economy. The collapse of old institutions forces individuals who had relied on networks buried in the wreckage to find new ways of getting things done. For example, individuals who had previously lived well thanks to their *nomenklatura* position have had to convert their political capital into other forms of social capital. Some have succeeded in enriching themselves by relying on anti-modern networks.

Three substantially different theories offer hypotheses about the significance of social capital in Russia today. The simplest is that of the classic neo-liberal economic paradigm. As Lawrence Summers, former chief economist at the World Bank, has asserted, "Spread the truth--the laws of

economics are like the laws of engineering. One set of laws works everywhere" (Keegan, 1993: 109). Its individualistic bias places primary emphasis on human capital. Micro-economic theories emphasize individual income as the primary determinant of welfare; sociologists invoke occupational class or social status and human capital theories emphasize education, either directly (educated people are better able to get things done) or indirectly (more education increases income). Social networks, formal or informal, are ignored. What counts are the resources of an individual.

**Hypothesis 1. Human capital--education, social class, age, etc.--is the primary determinant of individual health.*

By including age and gender in the definition of human capital, economists incorporate two primary biomedical influences on health.

All theories of social capital emphasize links between individuals as a source of welfare additional to individual attributes, rejecting the idea that physical and human capital are the sole causes of individual welfare.

**Hypothesis 2. Social capital networks, an individual's informal and formal links with others, are the primary determinant of individual health.*

However, there is little agreement about which types of what networks are most important for social capital and why.

As the term social capital has become fashionable, it is often a new label pinned on measures of social integration long familiar in sociological research, and sometimes incorporated under the heading of living conditions or lifestyles. Access to hospital and health care can arise from membership in formal organizations, whether an employment-related health insurance programme as in the United States or citizenship as a qualification for health service in a welfare state. Informal face-to-face networks can promote emotional and physical health by providing both companionship and informal care, and exclusion from social networks can be bad for health. Integration in both formal and informal networks can have positive interaction effects.

Many theories of social capital assume its utility is generic and diffuse. Individuals are assumed to have a general predisposition to become involved or not to be involved in social networks. Social capital can

thus be reduced to a single continuous variable and measured on a one-dimensional additive scale. Those who have more social capital will be healthier, and those who have less social capital will be more prone to ill health. However, a one-dimensional scale can refer to very different methods of networking, ranging from modern through informal, pre-modern networks to corrupt anti-modern networks.

Alternatively, social capital networks can be treated as situational. Organizing friends to help with a harvest is different from negotiating with a health insurance programme to receive treatment for a chronic disease. Insofar as social capital is sector-specific, it cannot be reduced to a single scale or used to characterize individuals, but ethnographic studies or situation-specific questioning can identify how individuals differ in the networks they use in a particular situation. Differences in the situation of post-Communist and OECD societies call attention to the cross-national dimension in social capital networks. In Soviet and post-Soviet Russia, social capital networks can be used to exploit the state for private advantage.

Differences between mono-causal theories are often matters of emphasis rather than stating logical contradictions. Social networks can take many non-exclusive forms, and, depending on circumstances, individuals can be involved in modern, pre-modern and anti-modern networks. It follows that a composite theory combining all the above mentioned approaches can best identify under what circumstances and to what extent different types of social capital networks are productive.

**Hypothesis 3. Human and social capital both influence individual health.*

The composite theory avoids both the exclusion of significant influences overlooked by either the human capital or the social capital approach. It also avoids needlessly debating whether a particular influence on health is to be classified as "social" or "human" capital.

III TESTING HYPOTHESES IN RUSSIA

Evidence from public health. The Soviet Union's record in health was positive--up to a point. Although Soviet health statistics raise many questions of validity and interpretation (see e.g. Meslé et al., 1992; Lutz et

al., 1994: Part III), in the first decades after 1945 life expectancy undoubtedly rose and infant mortality fell greatly. But by 1965 progress was slowing down and evidence of a deterioration in health began to emerge. Between 1965 and 1985 the reported life expectancy of female Russians rose by only 1.2 years, compared to an increase of 4.6 years in France and 4.5 years in the United States. Reported male life expectancy actually fell by 1.3 years in Russia between 1965 and 1985, and deaths due to drunkenness and cardiovascular disease began to rise. The failure of health to progress at the same rate as in OECD societies was common to Communist societies (Cockerham, 1999: 15).

Formally, Soviet laws authorized free and universal health care for all citizens. There was usually positive endorsement of the country's medical care system. Endorsement was highest among the oldest and least educated, who could compare it with what went before (Millar and Clayton, 1987: 49ff). However, the health service did not deliver all that it promised. In the 1970s, publication of such health indicators as infant mortality was suspended and by 1987 the government openly admitted that health care provision had been inadequate for several decades. Even though some enterprises offered elaborate health care to their workers, these facilities were not directed to meeting individual needs but to helping key enterprises in the military-industrial complex recruit and hold workers (Rose, 1996). 'The overall approach tended to be curative rather than preventive, with an emphasis on in-patient rather than out-patient care. There were few campaigns to promote healthy lifestyles, and little tracking or evaluation of health trends' (UNICEF, 1999: 14; see also Davis, 1988; Field, 1991; Williams, 1996; Field and Twigg, 2001).

Rapid industrialization involved the exploitation of Russia's substantial natural resource capital without regard to environmental consequences, resulting in levels of environmental pollution far higher than in West European countries today (Feshbach and Friendly, 1992). However, as Eberstadt (1999: 8) notes, 'What fells forests or slays wildlife does not necessarily kill people'. Fatalities due to environmental pollution, such as fatal respiratory afflictions or deaths by radiation-induced cancer, have not risen or have even fallen (see also Hertzman, 1995: 15).

While the Soviet Union promoted human capital by the generous

provision of education, its organizational pathologies created a stressful society. Stress at work was generated by economic plans setting unrealistic targets, forcing workers to "storm" to meet their monthly production norms. Nor was the home necessarily a safe refuge, for housing shortages restricted space and privacy. The pathologies of collectivized agriculture and food distribution forced most urban Russian households to grow food at an allotment or dacha to be sure of such staples as potatoes and cucumbers. Especially for men, drink and tobacco offered some relief from stress. The failure of the state's anti-drink campaigns illustrates the dissociation between the commands of top-down Soviet organizations and responses at the bottom (White, 1996).

Hospitals are a critical point of intersection joining individuals and bureaucratic organizations. Sooner or later individuals are likely to suffer painful or life-threatening illness that cannot be treated by home remedies. Persons with a high status in the party's *nomenklatura* could gain access to much better medical care and be treated at special hospitals. Ordinary Soviet citizens relied on whatever informal networks of friends, workmates and friends of friends that they had to get health care or whatever else they wanted by bending, breaking or avoiding bureaucratic rules. Private connections (*blat* or *sviazy*) were used to obtain health care in a system in which 'most private activity in the medical sector is illegal' (Davis, 1988: 130).

Since the break up of the Soviet Union, negative trends have continued or accelerated. Reported female life expectancy, which started to fall in the late 1980s, has now begun a slow recovery, but is still lower than the reported figure for 1980. Reported male life expectancy hit a low point of 57.6 years in 1994, before rising. It is still significantly lower than the level of 1965 (cf. UNICEF, 1999a: Table 4.3). Age-standardized rates of death rose to such an extent between 1992 and 1998 there have been an "excess" of 3,000,000 deaths by comparison with what would have happened had mortality rates remained at the level of 1987 (Eberstadt, 1999: 5ff). Russian life expectancy is now lower than in developing countries such as Mexico, Turkey, or the People's Republic of China (World Bank, 2001: 26f).

While aggregate statistics are striking, they raise as many questions

as they answer. If we take male mortality rates age 40-59 as a critical indicator (UNICEF, 1999a: Table 4.7), death rates within Russia were rising prior to the collapse of the Soviet Union. Moreover, after peaking in 1994, death rates fell by more than a quarter in the next three years. Nor does the legacy of Soviet health care provide an adequate explanation for high Russian mortality rates. In 1991 there was a substantial variation in death rates for males age 40-59 between 9.65 per thousand in Armenia and 15.06 per thousand in Latvia. By 1997 the range had widened from 6.58 per thousand in Georgia to 18.60 in Kazakhstan, with Ukraine and Russia ranking second and third in poor health (UNICEF, 1999a).

Whatever the year or the universe of comparison, aggregate statistics of health in large populations can hardly explain why some Russians are healthier than others. Whatever the measure, half the Russian population must have a health status above the median. The deterioration in health among a given sub-population can even increase the gap between the most healthy and least healthy individuals in the population. At best, aggregate ecological evidence suggests hypotheses about the causes of changes in health. To test hypotheses about what differentiates healthy from unhealthy individuals, we need data about a host of individual attributes, including human and social capital, as well as aggregate evidence.

Designing evidence. While sample surveys seeking to identify influences on health are common, most analyses of survey data linking social capital with health have involved the secondary analysis of data, "retro-fitting" the concept of social capital on data collected with other ideas in mind (cf. Kennedy, Kawachi and Brainerd, 1998: 2030). The 1998 New Russia Barometer survey analyzed here is a nationwide Russian survey designed to measure social capital in a multiplicity of forms. It drew on the experience of six previous New Russia Barometer (NRB) surveys that measured different forms of networking, some familiar in Russia and unfamiliar in the West, and some common to both types of societies.

The NRB questionnaire was administered to a full-scale multi-stage randomly stratified sample covering the whole of the Russian Federation, urban and rural in which VCIOM interviewed 1,904 Russians age 18 or over face-to-face in 191 widely dispersed primary sampling units. A comparison of those interviewed with official Goskomstat data of the

population showed little difference between the sample and the census figures; there were 45.1 percent men in the sample and an estimated 45.8 percent men in the adult population, and the age distribution in the sample almost exactly matched that of the reported population. Interviewing occurred between 6 March and 13 April 1998 (Rose, 1998).

Measures of self-reported health. Physical health is here assessed by a five-point scale asking individuals to assess their health in the past twelve months. A total of 54 percent of Russians reported average health, 21 percent reported health above average, and 25 percent said it was below average (Table 3.1). As would be expected, there are significant age differences between adults. Among those less than 30 years old, 42 percent said their health was above average, compared to only 6 percent age 60 or above. In a complementary manner, 46 percent of the oldest group reported their health below average, while only one in eight of the younger group did so.

Table 3.1 SELF-REPORTED RUSSIAN HEALTH, 1998

Age	18-29	30-59	60+	Total
	(Percent)			
<i>Q. Over the past twelve months, would you say your physical health has been:</i>				
Very good	9	2	1	3
Good	33	17	5	18
Average	47	59	48	54
Poor	11	17	37	20
Very poor	1	4	9	5
<i>Q. In the past year, would you say your emotional health has been:</i>				
Very good	5	1	1	2
Good	23	14	7	14
Average	60	59	60	59
Poor	10	22	26	20
Very poor	2	4	6	4

Source: New Russia Barometer VII, a nationwide sample survey of 1,904 Russians age 18 and above, interviewed by VCIOM, 6 March-13 April 1998.

While clinical evidence would provide better bio-medical evidence

of health status, it can be skewed by being drawn from a pre-selected population of individuals visiting a doctor or entering hospital. The New Russia Barometer survey found that 42 percent of Russians did not visit a doctor during the year and an additional 20 percent did not visit a doctor even though their normal physical activities were restricted at least once during the year. Only 38 percent felt their health was bad enough to require treatment by a doctor. Those hospitalized during the past year were 14 percent of the adult population, less than half those who saw a doctor and less than a quarter of those reporting themselves unable to carry out their normal physical activities throughout the year. Evidence of health based on official records of disability or receiving sickness benefit excludes individuals who are not brought within the official net--and official assessment of disability is influenced by fiscal and administrative procedures as well as by objective health status. Survey evidence from individuals who do not visit a doctor or receive disability or sickness benefit increases the representativeness of data by comparison with routine clinical or hospital records, official benefit statistics or mortality statistics (cf. Idler and Yael, 1997).

Emotional wellbeing is important in itself and because emotional disturbances can cause physical ill health. In addition, a person's emotional status is likely to be less affected by age than physical health, since young people and those with mid-life crises can be prone to emotional upsets, and the shocks of societal transformation affect Russians of all ages. Social capital networks ought to be specially good at providing emotional support that reduces the likelihood of emotional depression. The New Russia Barometer found that about three-fifths of Russians in all age brackets reported their emotional health during the past twelve months was average; one-sixth described it as above average, and just under a quarter said their emotional health was below average. The relationship between age and emotional health is less strong than between age and physical health.

Measures of human and social capital. The New Russia Barometer survey included five conventional measures of individual human capital: education, age, gender, total household income from all sources, and subjective socio-economic status. Logically, total household income is the

joint product of an intra-family network. In the distinctive circumstances of Russia the meaning of individual income is problematic. The great majority of Russian households have at least two incomes, households normally pool earnings for many purchases and individual wages and pensions are erratically late or unpaid. Income from all sources takes into account the practice of Russians supplementing their primary wage with earnings on the side. On strictly theoretical grounds, household income may be characterized as a social rather than individual asset. However, regression analyses with the number of incomes or persons in the household found these variables had no significant effect. Because occupational class in Soviet Russia did not reflect Western occupational prestige hierarchies, social status is here measured by a subjective 10-point scale. The median Russian respondent was below the mid-point.

The NRB questionnaire was lengthy, and the average interview was 60 minutes long. There were no signs of respondent fatigue, because the questionnaire concentrated on details of everyday concern to respondent, covering networks used to obtain food, housing, employment, protection against crime, leisure time activities, and so forth. This ensured that there were multiple indicators of social integration, an individual's cumulative use of networks, and situation-specific networks, as well as indicators of human capital. The independent variables included in the subsequent tables are thus a selection from a much wider repertoire of indicators.

Most of the nine measures of social integration are well established indicators of involvement in formal and informal networks, for example, membership in a formal organization; church attendance; living in a village where face-to-face contacts facilitate informal networks; primary reliance on government's welfare state network for help; and family membership in the Communist Party, and opinion forming networks. Because of their salience in different literatures, two measures of attitudes that arise from and/or predispose individuals toward involvement are also included. Trust in people--whether as a cause or consequence of social interaction--is low. Only seven percent of Russians said you can usually trust people, and 27 percent thought people can sometimes be trusted, whereas almost two-thirds said you need to be careful in dealing with people. On the other hand, many Russians have some sense of being able to control their own

life rather than being fatalistically controlled by events.

While social capital is often conceptualized as a generic or diffuse resource of individuals, the evidence offered may be a single indicator, for example, the number of formal organizations to which an individual belongs. By contrast, the NRB questionnaire, following Coleman's emphasis, asked which networks people would rely on in a variety of different yet familiar situations. For each situation, alternatives were offered, ranging from the formal (e.g. buying a house from an estate agent) informal networks (relying on friends rather than a landlord or a paid worker to help in house repair); or anti-modern networks (e.g. offering a bribe to be allocated a municipally owned house). If an individual had no network to which to turn, this constituted a specific example of social exclusion. The generic social capital of each individual is here measured by an additive scale showing the number of times an individual invoked a market, anti-modern or informal network, or was socially excluded because without any network to turn to in different situations. Hardly any Russian consistently relies on one type of network (for questions, see Rose, 1998; for a detailed discussion of concepts and the creation of scales, see Rose, 1999b: 154ff).

Five situation-specific health questions were asked (Table 3.2). Having someone outside the family to rely on when ill focuses on the use of informal, non-bureaucratized and non-monetized networks for personal social services that in Britain may be provided by local government and in the United States by the market. A majority of Russians were confident of such help. Offering to pay someone to expedite hospital treatment is a classic indicator of anti-modern networking, for it breaks bureaucratic rules of equity and honesty to obtain a public service. Exercising with others involves both physical and social activities. Just under a quarter of Russians sometimes or often take exercise; two-thirds of those who exercise do so alone. Even though smoking may reflect social and economic pressures, being a smoker is an individual attribute and its consequences immediately affect the individual smoker. Thus, three situation-specific influences refer to social capital networks--relying on friends, exercising with a group, and using connections to get medical treatment--and two are individual attributes, smoking and exercising alone.

Table 3.2 SITUATION-SPECIFIC INFLUENCES ON HEALTH

	<i>Definitely</i>	<i>Probably</i>	<i>Doubtful</i>	<i>No</i>
Friends will help if ill	22%	36%	29%	13%=100%
	<i>Alone</i>	<i>In group</i>	<i>Doesn't exercise</i>	
Exercises often, sometimes	16%	8%	76%=100%	
	<i>Currently</i>	<i>In past</i>	<i>Never</i>	
Smokes	34%	14%	52%=100%	
	<i>Yes</i>	<i>No</i>		
Makes payment to doctor	10%	90%=100%		

Source: 1998 New Russia Barometer, as in Table 3.1.

Testing the influence of social capital on health. Three regression models are presented for physical and for emotional health. The first tests Hypothesis 1, stressing the importance of human capital; the second Hypothesis 2, stressing the importance of social capital; and the third brings both sets of influences together in a composite model that can show whether or not social capital indicators remain significant, after controlling for the effects of age, education, gender, income and social status.

Hypothesis 1, human capital, is of substantial importance for physical and emotional health. Altogether, the five indicators can explain 18.1 percent of the variance in self-reported physical health, and 12.3 percent of the variance in self-reported emotional health (Table 3.3). The significant decline in health with age is very predictable. So too is the fact that age has a stronger influence on physical health (Beta: -.34) than on emotional health (Beta: -.17). Consistent with age-specific mortality statistics, gender is also significant for health--but the sign is reversed. Russian women tend to have less good health than men (cf. Watson, 1995). This is due to the difference between analyzing health in terms of mortality statistics or by looking at the living. For Russian men, the alternative to being of average or better health is being dead and the latter becomes increasingly likely with age. By contrast, Russian women are more likely to experience poor health because they live through decades of decline. Within each age group, women are more likely to report poor physical or emotional health than men--and the gap increases with age. Among the

Table 3.3 HUMAN CAPITAL AND SELF-ASSESSED HEALTH

	<i>Physical health</i>	<i>Emotional health</i>
% Variance explained: R ²	18.1	12.3
	(Betas significant at <.05)	
Age	-34	-17
Female	-10	-10
Household income	13	17
Subjective social status	-	15
Education	-	-

Source: As in Table 3.1.

over-60s, 10 to 12 percent more women have poor health. But in this age bracket, women outnumber men by a ratio of more than two to one.

The consistent significance of household income for health follows from the simple correlation proposition: having more money is good for health. However, it can be argued that having better health also enables individuals to earn money; testing for this, or for reciprocal causation, would require a much more elaborate data set and methods at hand. Subjective social status (or class, to use the conventional Western sociological term) is not significant for physical health, but has a larger Beta coefficient for emotional health than does gender. Education is often considered the paradigmatic indicator of human capital, and it might be expected that education would be more important than income as a means of securing health. However, it is the one influence in the human capital model that is not significant for either physical or emotional health.

Hypothesis 2, social capital is of substantial importance for both physical and emotional health. Altogether, the 18 varied indicators explain 16.2 percent of the variance in physical health, and 15.7 percent of the variance in emotional health (Table 3.4). A noteworthy feature of the regression analysis is that all three forms of social capital have some significant influence on health.

All four generic indicators of social capital--involvement in market, anti-modern, or informal networks and social exclusion--are statistically significant at least once. It follows from the social capital literature that those who are socially excluded should have worse physical and emotional

Table 3.4 SOCIAL CAPITAL AND SELF-ASSESSED HEALTH

	<i>Physical health</i>	<i>Emotional health</i>
% Variance explained: R ²	16.0	15.7
	(Betas significant at <.05)	
SOCIAL INTEGRATION		
Control own life	19	20
Most people can be trusted	05	08
Communist in family	-06	-
Church attendance	-05	-
Uses friends for information	-	-06
Belongs to organizations	-	-
Opinion leader	-	-
Relies on government help	-	-
Lives in village	-	-
GENERIC SOCIAL CAPITAL SCALES		
Social exclusion	-	-07
Anti-modern networks	12	06
Market networks	13	12
Informal networks	-05	-05
HEALTH SPECIFIC		
Someone rely on if ill	14	14
Smoker	11	-09
Pay doctor to expedite treatment	-	05
Exercise with others	-	-
Exercise by self	-	-

Source: For source of survey data and assessment of physical health, see Table 3.1.

health. What does not follow, however, is that those who are more involved in informal networks are also more likely to have worse emotional health. This suggests that while informal networks can add to wellbeing in a pre-modern society, in the Russian context they may be an indirect measure of individuals retreating from formal organizations of an "anti-modern" society that has left them with emotional scars. The positive

association between relying on the market and being in good physical health is to be expected, and may be considered a proxy indicator of income. But it is striking that also in good physical health are people who rely on more anti-modern networks, whether they use money or connections to bribe officials to break rules.

Two health-specific indicators are significant. Those who are more certain of having someone to rely on if ill are better in terms of physical as well as emotional health. This may reflect the fact that many illnesses bothering people do not require hospital or even medical treatment, and may be cured by home remedies and care. It is noteworthy that an anti-modern alternative, paying bribes or "tips" to get health care, does not appear to leave people feeling better. Whereas non-smoking is associated with good emotional health, smoking appears positively associated with good physical health. This reflects the fact that smoking is highly correlated with youth, for 44 percent of Russians under age 30 report they currently smoke, compared to 15 percent age 60 or more. When both age and smoking are included in the composite model, smoking or non-smoking have no statistical significance; see Table 6 below). Net of other influences, exercise does not show any significant association with health, and this is true of individuals exercising in a social group and those exercising alone.

A question asking people the degree to which they feel able to control what happens in their lives or must take the consequences of whatever happens was asked because it shows a significant effect on health in OECD countries (see e.g. Syme, 1989; Skinner, 1996). In post-Soviet Russia, the capacity to control one's own life is not to be taken for granted. The replies to the question--*Some people feel they have completely free choice and control over their lives, while others feel that what they do has no real effect on what happens to them. How about yourself?*--showed a normal distribution on a ten-point scale, with the highest point reflecting the greatest self-confidence. Amidst the turbulence of Russian life, some people have overcome socially imposed difficulties and have gained individual confidence in doing so, while others have "learned helplessness" (Evans, 1994: 14). become more fatalistic. The median Russian was at point 5 (the psychological mid-point of the scale); 37 percent were in the positive range of 6 to 10. The proportion of Russians feeling control over their own lives is lower than in

OECD nations. The 1990 World Values Study found that in the United States, 85 percent were at the positive end of this scale, 86 percent in Finland, and on average in Eastern Europe, 58 percent.

Among all the indicators of social capital, however defined, a sense of controlling events has the largest Beta for physical and emotional health (Table 3.4). It may be suggested that feeling a sense of control is a consequence of conditions also promoting an individual's good physical and emotional health; more intensive statistical analysis shows this is not the case (cf. Bobak et al., 1998: 272). In Russia, a sense of controlling events is not so much an indicator of integration in society as of success in avoiding being overcome by life in an abnormally unhealthy and even "anti-modern" society. Strictly speaking, self-control over a negative environment is not a consequence of social capital networks. If it were, then it would be statistically insignificant, net of the effect of the other 17 social capital indicators. On the other hand, it is certainly not a measure of human capital, for insofar as it is an individual attribute it is one that explicitly emphasizes the relationship between the individual and society. It is therefore best conceived as a social psychological determinant intermediate between the two types of capital.

While trust in most people is here significantly associated with physical and emotional health, interpretation, as noted above, is problematic (see Dasgupta, 1988; Newton, 1999; Mishler and Rose, 2001). While it is clear that trust in other people is a correlate of involvement in social networks and physical and emotional health, the direction of the arrow of causation is open, and may be reciprocal. Moreover, the association is not strong. Trust in other people has one of the two lowest Betas among the nine significant influences on physical health, and the Beta for significant influences on emotional health is among the three lowest. Moreover, the importance of the relation between trusting other people and health is muted by the fact that most Russians are distrustful. The relationship between emotional health and trusting friends rather than newspapers or television for information is less strong and negative. This implies that face-to-face sources of information may be an indicator of "backwardness" or, alternatively of stresses generated by experiencing the gap between Soviet media and everyday reality.

Most indicators of social integration consistently fail to appear significant influences on health. Belonging to organizations, assumed to be a major indicator of social capital in many studies of Western societies, is consistently insignificant as an influence on Russian health. One reason for this is that in Russia it is a constant not a variable. When Russians are asked a series of explicit questions about belonging to such face-to-face local organizations as a sports, music or arts club, a housing or neighbourhood association or political party, only 9 percent said they belonged to any organization (Rose, 1998: 60). If involvement is expanded to include those attending church at least once a month (4 percent) and union members who trust local union leaders to represent their interests (8 percent), the proportion of Russians outside all institutions of civil society remains very high. Living in a village, a proxy for intensive informal networks, is consistently insignificant. So too is reliance on government for help when faced with personal problems, a practice encouraged by Western welfare states. And an anti-modern indicator, links with the Communist Party, also has no effect on health. Church attendance is significant for physical health, but the negative sign suggests it is a proxy for old age, with which it correlates.

The composite model offers the strongest test for the importance of human and social capital. Even though social capital influences can on their own explain about as much variance in health as human capital, it is possible that the significant social capital measures are dependent on human capital. If this is the case, then combining the two sets of influences should greatly reduce or eliminate the significance of social capital characteristics. Alternatively, leaving out the influence of human capital in theories of social capital can be justified only insofar as human capital is insignificant if the two are combined. The composite model postulates that human and social capital both influence health independently of each other.

Hypothesis 3 predicts, and multiple regression analysis confirms, the importance of both human and social capital. Each has a significant influence on physical and emotional health, net of the effect of the other (Table 3.5). Together, the influences explain 22.9 percent of the variance in self-assessed physical health and 19.3 percent in emotional health.

Table 3.5 COMPOSITE MODEL OF INFLUENCES ON HEALTH

	<i>Physical health</i>	<i>Emotional health</i>
% Variance explained: R ²	22.9	19.3
	(Betas significant at <.05)	
<u>Human capital</u>		
Age	-28	-12
Household income	09	12
Female	-08	-09
Subjective social status	-	09
Education	-	-05
<u>Social Capital</u>		
GENERIC SOCIAL CAPITAL SCALES		
Market networks	06	08
Social exclusion	-	-08
Informal networks	-	-05
Anti-modern networks	-	-
HEALTH SPECIFIC		
Someone rely on if ill	11	11
Smoker	-	-
Pay doctor to expedite treatment	-	-
Exercise with others	-	-
Exercise by self	-	-
SOCIAL INTEGRATION		
Control own life	13	15
Most people can be trusted	06	09
Uses friends for information	-05	-06
Communist in family	-	-
Church attendance	-	-
Opinion leader	-	-
Relies on government help	-	-
Belongs to organizations	-	-
Lives in village	-	-

Source: see Table 3.1.

This is an increase of a quarter to three-quarters in the amount of variance in health that either form of capital can explain on its own. However, the

increase is less than if the variance explained had been additive. In part this is due to a reduction in value of the Beta coefficients in the composite model, as more effects are taken into account. In addition, the total number of significant influences on physical health, eight, is four less than the sum of influences significant in the two separate models, and one less than those significant for the separate models of emotional health.

Up to a point, the composite model confirms that health is not only a form of human capital in itself, because healthy people are more productive, but also that it is a form of human capital that is subject to influence by other forms of human capital. The composite model emphasizes the incompleteness of an approach to health that is limited to socially significant attributes of individuals. The wide range of measures included in the New Russia Barometer questionnaire makes it possible to demonstrate that social capital cannot be reduced to a single measure, whether the health-specific indicator of having someone to rely on if ill, the problematic indicators of trust, or even a generic measure of negative social capital, that is, exclusion from all kinds of networks, formal and informal, market and anti-modern. The failure of an individual's membership in organizations to be associated with health cautions against using aggregate membership statistics as a proxy for social capital in aggregate analysis. The fullest understanding of the influence of social factors on health is best achieved by recognizing the independent influence of selective forms of both individual and social capital.

The cumulative impact. To determine how much human and social capital influence health, we must turn to the unstandardized coefficient (b), which estimates how much change in health occurs as the result of one unit of change in an independent variable. Significant influences are, except for gender, ordinal or continuous variables, but their scales differ in length from rouble income to the four-point scale measuring trust in other people. Therefore, impact is here shown by calculating how much a Russian's health is likely to improve if, net of other influences, a person's position on a significant independent variable moved from average to one standard deviation above the mean.

The cumulative impact of social capital on physical health is substantial (Table 3.6). Improvement depends not only on positive

Table 3.6 IMPACT OF SOCIAL AND HUMAN CAPITAL ON HEALTH

(Change calculated by multiplying the unstandardized regression coefficient, *b*, of a significant variable by one standard deviation from its mean.)

PHYSICAL HEALTH	
Mean rating of physical health*	2.96
<u>Effect of one standard deviation increase in:</u>	
<i>Social capital influences</i>	(0.35)
Control over what happens to oneself	3.07
Having someone to rely on if ill	3.17
Trusting most people	3.22
Uses market networks	3.27
Not needing friends for information	3.31
<i>Human capital influences</i>	(0.38)
Higher household income	3.39
Male	3.46
Younger	3.69
EMOTIONAL HEALTH	
Mean rating of emotional health*	2.90
<u>Effect of one standard deviation increase in:</u>	
<i>Social capital influences</i>	(0.48)
Control over what happens to oneself	3.02
Having someone to rely on if ill	3.10
Trusting most people	3.17
Less subject to social exclusion	3.23
Not needing friends for information	3.28
Less reliant on informal networks	3.32
<i>Human capital influences</i>	(0.36)
More income	3.48
Gender	3.54
Higher subjective social status	3.61
Less educated	3.65
Younger	3.74

*Scale: 1= very poor to 5= very good

Sources: Physical and emotional health as in Table 3.1; multiple regression analyses as in Table 3.5.

involvement in some networks, for example, having someone to rely on when ill, or not being excluded from all kinds of networks, informal, market and anti-modern that help and being plugged into impersonal rather than informal sources of information about contemporary Russian life. Russians who are one standard deviation about the mean on all five social capital influences would have an average health rating of 3.32, more than a third of a point higher than the average Russian. Not surprisingly, being younger rather than older has the biggest impact. Control over what happens and having someone to rely on when ill come next in impact. Human capital can additionally improve physical health. The health rating of a Russian one standard deviation above average in income, younger by a similar amount, and male rather than female rises by 0.37 of a point. An individual who is typically one standard deviation above the mean on all significant influences would have a health rating closer to good than to average. A Russian in the top five percent of society on all these influences would have a health rating between good and very good.

The cumulative impact of social capital on emotional health is even more substantial. Six significant measures increase emotional health by almost half a point, from below-average to a position better than average. The biggest impact comes from having a sense of control over what happens to oneself; second in impact is not being socially excluded. While all five human capital indicators are statistically significant, their substantive impact is weak. The five measures increase emotional health by 0.37 points. Income has the biggest impact on emotional health, more than the impact of being younger. Collectively, social and human capital can improve emotional health more than physical health, as a one standard deviation increase in each significant variable would raise a Russian's emotional health by seven-eighths of a point, from just below average to near good, and a Russian in the top five percent on all measures would be close to very good in health.

Since social and human capital each have a substantial and additive impact on health, the composite model is the best measure of what is gained by taking account of both in analyzing social determinants of health. Additional support for the composite model comes from other analyses of the New Russia Barometer survey using different dependent

variables, such as getting enough food, income security (that is, being able to borrow money from friends if wages or a pension are not paid) and safety from crime in the streets. (see Rose, 2000). Among human capital influences, age, gender, income and social status are normally significant influences on non-health forms of welfare, and education is normally not. Among social capital indicators, a sense of control over one's life, social exclusion, trust in other people, and having a network of information sources are normally significant. The relative importance of human as against social capital varies more for other welfare measures than for health, but this does not detract from the overall support given to the composite model as the best model for determining welfare for getting food, income security and avoiding crime, as well as promoting health.

IV BROADER IMPLICATIONS

Dynamic inferences from cross-sectional evidence. A single cross-section survey can only address dynamic issues indirectly by exploring the extent to which the health of younger Russians is subject to different influences than the population as a whole. Regression analyses using the composite model were run for Russians under the age of 40. The elements of human and social capital affecting the physical and emotional health of younger Russians were almost the same as those for the Russian population as a whole, except for the expected reduction in the significance of age and gender.

Cohort differences in health imply change--but only if they arise from causes that permanently differentiate age cohorts rather than simply reflecting differences in the life cycle, such as the influence of ageing. Education is the paradigm example of a predictable inter-generational cause of force for change, because younger cohorts are invariably more educated and education is not reduced by an individual moving through the life cycle. Furthermore, the amount of education each cohort receives is influenced by public policy. Unfortunately, education has no significant influence on physical health and an increase in the education of the median Russian from its current academic secondary level to technical college education at tertiary level, would increase emotional health by only 0.04 points on a 5-point scale (see Table 3.6). Cohort effects may also be

extrapolated when causes of poor health or premature mortality have a lengthy history, such as cardiovascular diseases and cirrhosis of the liver (cf. Keating and Hertzman, 1999). Insofar as they are present in younger or middle-age cohorts, life cycle effects will exacerbate their "negative momentum" (cf. Eberstadt, 1999: 14).

In social capital terms, one positive difference between cohorts is that younger Russians appear to have a significantly greater sense of control of their own lives (mean score 6.0) than middle-age or older Russians (mean scores of 5.0 and 4.6 respectively). Insofar as younger Russians carry a sense of confidence in controlling events into middle-age and beyond, this will provide some positive impetus to health, without the intervention of public policy. Nor are other social capital influences significant for health likely to be affected by public policy, for example, having friends to rely on when ill or trusting other people. In a Scandinavian-style welfare state, where public policies are assumed to be benign, this would be frustrating. However, in the Russian Federation, where there is a history of state repression and corruption, the autonomy of social capital networks from government may be considered desirable, allowing scope for health to improve as a byproduct of social changes independent of government.

Income is the most significant human capital influence amenable to public policy. An increase in earnings need not wait for the replacement of generations. In many countries of East Central Europe the decline in income from the collapse of the command economy was reversed in a few years. In Russia, the decline has been sharper and even though statistics show official income no longer declining it is not recovering. Moreover, official statistics do not tell the whole story of the economy: the 1998 NRB survey found 37 percent of households had sufficient discretionary income to buy a Video Cassette Recorder, and the great majority of households have adequate coping mechanisms to be resilient in the face of loss of income or other resources. But to secure health benefits, more is required; there must be positive and sustained growth in household incomes, a change that would benefit Russians of many ages. Whilst the logic of this prescription is clear, given all that has gone before in Russia, it is a prescription that is far easier to write than to fill.

The need for cross-national comparisons. For individual Russians, normal methods of coping are successful--up to a point. While Russian welfare appears inferior compared with an OECD society, the great mass of the population is able to sustain itself. Even the pathologies causing early death among Russian men are less likely to arise from destitution than from the continuance of pre-modern practices such as binge drinking, or anti-modern pathologies such as industrial injuries, car accidents or being a victim of organized crime (cf. Shkolnikov and Mesle, 1996).

However, what is *normale* in Russia is not what is normal in a modern society. Modernization, in the classic sense of a shift of the population from the pre-modern or transitional to the modern sector, cannot take place as long as Russian society is permeated by interdependencies between modern, anti-modern and pre-modern activities within each household and within major formal organizations of the polity and the economy. The danger for Russia is that reliance on a multiplicity of networks--modern, anti-modern and informal--is an equilibrium in which actions supplied by elites are matched by popular expectations and demands. However, such an equilibrium is a low-level trap, because reliance on anti-modern networks to get things done is an obstacle to creating a dynamic, modern society (World Bank, 1997: iii; Bhalla, 1997).

Many Sovietologists argued the uniqueness of Russia (see e.g. Keenan, 1986), and cultural and path-determined theories of social capital stressed by Putnam (1993) and Inglehart (1997) imply that Russia ought to be unique. But biomedical models emphasize the universality of determinants of health. Insofar as this is the case, then the above evidence is of limited general significance. However, theories of command economies and of market economies assume commonalities across cultures. The spread of the Communist system from Moscow made it relevant to upwards of 400 million people in Europe. Substantial elements of Marxism such as collectivist agriculture have appeared in 33 countries across Africa, Central America and Asia too. If China is included, the total population subject to Communist one-party rule and a non-market economy rises to 1.5 billion (cf. World Bank, 1996).

Generalizability from Russia can be examined with comparable data

from the Centre for the Study of Public Policy nationwide sample surveys in Ukraine, the Czech Republic and the Republic of Korea (see Rose and Haerpfer, 1998; Shin and Rose, 1997). In each country a limited number of comparable questions were asked about getting things done in four situations: gaining admission to a university; getting a subsidized flat; securing a government permit; and obtaining prompt hospital treatment for a painful disease. Insofar as Russia is unique, responses should differ greatly from the other three countries. Insofar as responses reflect the experience of dictatorship, they should be similar in all four countries. Insofar as networks reflect the consequences of a command economy, then Russians, Ukrainians and Czechs should be similar and differ from Koreans. In addition, Koreans can claim uniqueness here because they have an Asian culture. Insofar as the pathologies of the Soviet experience are distinctive, then Russians and Ukrainians should differ from Czechs as well as Koreans.

Consistently, Russians and Ukrainians appear similar (Table 4.1). In both societies the most frequently recommended tactic to get a flat, a government permit or prompt hospital treatment, is anti-modern, a cash payment to officials or using connections; for university admission it is the second most frequently mentioned tactic. Few Russians and Ukrainians think that nothing can be done when formal organizations fail; four-fifths have some sort of network to invoke in every situation. Except for paying a tutor for a youth with exam difficulties, the market is of secondary importance in both Russia and Ukraine. People socialized in the former Soviet regime rarely see pleading with bureaucrats as useful.

The impact of the Soviet Union on instrumental social capital is confirmed by their consistent differences from Czechs. Ex-Soviet citizens are four times more likely than Czechs to turn to anti-modern behaviour to get a youth into university; two to three times as likely to use corruption or connections to get a better flat; almost twice as likely to break the law if having trouble getting a government permit; and up to twice as likely to use anti-modern methods to get prompt hospital treatment. Nor is the distinctiveness of Czechs a consequence of passivity: Czechs tend to be less likely to think that nothing can be done than do ex-Soviet citizens. Big

Table 4.1 CROSS NATIONAL COMPARISONS OF INSTRUMENTAL NETWORKS

		<u>Strategy</u>		
	Anti-modern connections	Personal	Market	Passive
1. <i>Getting treatment for a painful disease when hospital says one must wait for months</i>				
Russia	57	13	11	19
Ukraine	39	12	34	15
Czech Republic	24	31	31	14
Korea	(not applicable; no government health service)			
2. <i>Getting into university without good enough grades</i>				
Russia	33	6	39	22
Ukraine	31	3	45	21
Czech Republic	7	2	72	18
Korea	3	2	37	57
3. <i>Actions to get a better flat when not entitled to publicly subsidized housing.</i>				
Russia	45	n.a.	30	25
Ukraine	34	10	28	27
Czech Republic	14	23	48	15
Korea	8	13	64	15
4. <i>Action if an official delays issuing a government permit</i>				
Russia	62	18	n.a.	20
Ukraine	61	18	n.a.	21
Czech Republic	35	46	n.a.	19
Korea	21	45	n.a.	34

Corrupt option: Offer bribe, use connections, make up a story

Bureaucratic: Write a letter of complaint, push officials to act

Market: Buy what you want legally; education: pay a tutor

Passive: Nothing can be done

Sources: New Korea Barometer 1997 (N: 1,117); New Democracies Barometer V 1998 (N: 1,017); Russia Social Capital survey 1998 (N: 1,908).

differences arise because Czechs are more likely to rely on the market or to personalize and plead with bureaucrats to expedite their demands. This suggests that the heirs of the Habsburg tradition, while often dilatory or obstructive, are not corrupt to the degree of ex-Soviet officials, an

interpretation supported by the relative superiority of the Czech Republic to Russia and Ukraine on Transparency International ratings.

Koreans are even more distinctive, being passive and saying nothing can be done about the actions of government officials. While education is highly valued, Koreans also accept decisions of university admissions officials; 57 percent think that nothing can be done to reverse refusal of admission. Similarly, 34 percent think that one must wait for a government permit to be issued and not break the law to expedite matters; at most Koreans advise writing a letter begging an official to take action. The absence of a European-style welfare state means that the operation of a public hospital system is not a concern of Koreans.

Taken together, replies in Table 4.1 suggests similarities within the Soviet Union in the use of instrumental social capital networks and dissimilarities between its peoples and Koreans and Czechs, who appear more similar than Czechs and former Soviet citizens. For example, in the readiness to use anti-modern networks to get a flat, there is a difference of 31 percentage points between Czechs and Russians as against a 6 point difference with Koreans. There is a 26 percentage point difference between Czechs and Russians in readiness to use anti-modern networks to get a university place, and no significant difference between Czechs and Koreans. Similarly, there is a 27 point difference between Czechs and Russians in relying on anti-modern tactics when having difficulties in getting a government permit, and less than half that difference with Koreans.

However, there are major differences within the Soviet Union in mortality statistics between the eight countries--Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation and Ukraine--included in the European Commission project on Living Conditions, Life Styles and Health, of which this report is part. Assuming that these statistics accurately report living conditions there, then it is necessary to disentangle the effects of compositional differences (for example, in the age structure of populations or in their absolute incomes); differences in the effect of social capital networks; and cultural differences (for example, between societies with Moslem predominance).

The questionnaire for the sample survey to be conducted in the eight CIS nations will therefore have a full set of measures of different dimensions of social capital referenced in this report (see Appendix A) in order to determine under what circumstances and to what extent findings from a survey in the Russian Federation are or are not generalizable to other CIS countries where aggregate mortality statistics differ. Insofar as social capital and other life style and living condition characteristics can account for better health of individuals, notwithstanding the common CIS context, this will be important knowledge for improving health in a very troubled part of the world.

Appendix: NETWORK SCALES FOR GETTING THINGS DONE

<i>Variable</i>		<i>Market</i>	<i>Informal</i>	<i>Anti- Modern</i>	<i>Excluded</i>
		(Codes)			
B4	House repair	2	3,4	5	6
B5	Get flat	2	4	5,6	7
B11b	Safety on street	-	1,2	-	-
B13	Theft from house	e.1,2	-	d.1,2	-
D6ab	Portfolio of economies	3	1	2	4
E1	Get state benefit	-	2	3,4	5
E3a	Borrow from bank	1,2	-	-	-
E5	Retirement	6	5	-	8
G1	Get permit	-	-	2,5,6	7
L6	Admit university	2	4	5,6	7
J5	Doctor	3	5	4	6

(First column refers to question text as in *Studies in Public Policy* 303. The following are derived variables as they appear in the SPSS file: housrep, getflat, portfo, retres, getpermi, getuniv).

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Referring to literature in sociology, mass communication, and public health, we conceptualize and operationally define "health social capital" and "individual health social capital" and then posit and test a model for its development in response to a public health media campaign. The campaign evaluated here was designed to stimulate behaviors that would provide a more supportive social environment for children and youth, an environment which we consider to be richer in aggregate health social capital. Please type a message to the paper's authors to explain your need for the paper. Paper: The impact of a health campaign on health social capital. To: Esther Thorson, Christopher E Beaudoin. From (Name) Community social capital (defined at regional level) appears not to affect health once individual-level social capital is controlled for. Taken at face value, the findings suggest that policy interventions should be targeted at improving primarily individual social capital. In doing so they would achieve a double effect: on the one hand they would directly improve individual health; on the other they would contribute to community social capital, which reinforces the beneficial role of individual social capital. The authors contribute to fill important gaps for theoretical and empirical measurement of social capital and the causal impact of social capital on health. They argue that policy interventions should be targeted at improving individual social capital. How does social capital matter to the health status of older adults? Evidence from the China Health and Retirement Longitudinal Survey. *Economics & Human Biology*, Vol. 22, Issue. , p. 177. The impact of social capital on changes in smoking behaviour: a longitudinal cohort study. *European Journal of Public Health*, 21, 3, 347-54. Gray, A. 2009. As well, there are few studies that examine the impact of social capital on immigrant health status at the quantitative level. This paper addresses these gaps through econometric analyses. Using data from the Longitudinal Survey of Immigrants to Canada (LSIC), we look at the dynamic changes in the health status of recent immigrants in their initial four years in Canada, focusing particularly on the effect of social capital on immigrant health. Our descriptive and regression results provide support for the "healthy immigrant effect"; however, the results show that this effect diminishes over time. Income is related to health in three ways: through the gross national product of countries, the income of individuals, and the income inequalities among rich nations and among geographic areas. A century ago, putting the infant mortality of social class V or single mothers for the year 2000, 7.9 per 1,000, beside that of the servant-keeping class of York for 1900 suggests that the problems of ill health due to material deprivation have, to a large extent, been solved in today's industrialized countries. Why then should such countries continue to suffer from large inequalities in health? Impact of redistribution of income. Angus Deaton has shown this nonlinear increase in probability of dying with decreasing income. He draws an important implication from this.