

### Studying Relationships

In the early 1960s, sociologist Leo Goodman proposed a probability sample-based method for studying relationships among individuals in a population. An initial zero-stage (Stage 0) probability sample is drawn. Each person in the sample is asked to name  $k$  persons with some particular relationship; example relationships are best friends, most frequent business associate, persons with most valued opinions, and so on. At Stage 1 these  $k$  persons are contacted and asked to name  $k$  persons with the same relationship. The Stage 2 sample consists of new persons named at Stage 1, that is, persons not in the original sample. At each subsequent stage, only newly identified persons are sampled at the next stage. The process may be continued for any number of stages, designated by  $s$ .

The simplest relationships involve two persons where each names the other. If the initial sample is a probability sample, an unbiased estimate of the number of pairs in the population that would name each other can be obtained. More complex relationships such as "closed rings" can be studied with more stages of sampling. For example, person A identifies person B; person B identifies person C; and person C identifies person A.

If the initial sample is drawn using binomial sampling so that each person has probability  $p$  of being in the sample and  $s = k = 1$ , an unbiased estimate of the number of mutual relationships in the population designated by  $M_{11}$  is

$$\hat{M}_{11} = \frac{y}{2p}$$

where  $y$  is the number of persons in the Stage 0 sample who named a person who also names them when questioned either in the initial sample or in Stage 1.

The theory for estimating the population size for various types of interpersonal relationships has been, or can be, developed assuming binomial sampling and may apply, at least approximately, when using other initial sample designs more commonly applied in practice, for example, simple random sampling (without replacement).

James R. Chromy

See also Coverage Error; Multi-Stage Sample; Nonprobability Sampling; Probability Sample; Rare

Populations; Respondent-Driven Sampling (RDS); Sampling Frame; Sampling Without Replacement

### Further Readings

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## SOCIAL CAPITAL

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Building on the work of sociologist James Coleman, political scientist Robert Putnam popularized the term *social capital* to describe how basic features of civic life, such as trust in others and membership in groups, provides the basis for people to engage in collective action. Even though social capital is not explicitly political, it structures various types of activities that are essential to maintaining civil and democratic institutions. Thus, *social capital* is defined as the resources of information, norms, and social relations embedded in communities that enable people to coordinate collective action and to achieve common goals.

It is important to recognize that social capital involves both psychological (e.g., trusting attitudes) and sociological (e.g., group membership) factors and, as such, is a multi-level construct. At the macro level, it is manifested in terms of connections between local organizations, both public and private. At the meso level, it is observed in the sets of interpersonal networks of social affiliation and communication in which individuals are embedded. And at the micro level, it can be seen in the individual characteristics that make citizens more likely to participate in community life, such as norms of reciprocity and feelings of trust in fellow citizens and social institutions.

Research on social capital, despite its multi-level conception, has focused on the micro level with individuals as the unit of analysis, typically using cross-sectional surveys to measure citizens' motivation, attitudes, resources, and knowledge that contribute to the observable manifestation of social capital: civic participation. The meso-network level is represented through individuals' reports of their egocentric networks in terms of size and heterogeneity as well as frequency of communication within these networks. Examinations of individuals' connections to community institutions

and the connections among them are rare. These studies have been restricted to examining individuals' perceptions and attitudes regarding specific local institutions and the community generally (e.g., community attachment) as they relate to participation.

Most prominent among these institutional assessments has been political trust or trust in government, again measured mainly through individual-level survey assessments. Trust developed in interactions with social groups and government institutions is thought to function as a heuristic that is applied to decisions to participate in collective action efforts and is seen as foundational to the decision to become involved in civic life. The experience of participating in community projects, volunteering, and engaging in other membership activities reinforces feelings of trust and norms of cooperation, encouraging future civic involvement.

Survey measurement of civic participation, discussion networks, and social trust have often centered on the relationship between these indicators of social capital and patterns of media use. Survey evidence largely confirms that participation and trust have slipped in tandem, contributing to the erosion of community life. Changes in media adoption and use—for example, rising rates of television usage and declines in newspaper readership—across generational cohorts is thought to explain this decline, with television use both privatizing leisure time and presenting an increasingly harsh picture of the social world in televised representations of social reality. The combination was theorized to explain the correspondence between the rise in television use and the decline in social capital. Recent survey evidence from Dhavan Shah and his colleagues, from both cross-sectional assessments and panel survey designs, calls these assumptions into question. Instead, this research finds viewing news, documentary, and dramatic content can have pro-civic effects. This logic has been extended to the Internet, which has also been found to sustain social capital when used to gather information and strengthen social linkages.

*Dhavan V. Shah and  
Homero Gil de Zuniga*

*See also* Trust in Government

#### Further Readings

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## SOCIAL DESIRABILITY

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Social desirability is the tendency of some respondents to report an answer in a way they deem to be more socially acceptable than would be their "true" answer. They do this to project a favorable image of themselves and to avoid receiving negative evaluations. The outcome of the strategy is overreporting of socially desirable behaviors or attitudes and underreporting of socially undesirable behaviors or attitudes. Social desirability is classified as one of the respondent-related sources of error (bias).

Social desirability bias intervenes in the last stage of the response process when the response is communicated to the researcher. In this step, a more or less deliberate editing of the response shifts the answer in the direction the respondent feels is more socially acceptable. Since the beginning of survey research, there have been many examples of socially desirable answers: for example, overreporting of having a library card, having voted, and attending church and underreporting of bankruptcy, drunken driving, illegal drug use, and negative racial attitudes.

The concept of social desirability has four nested characteristics: (1) The highest layer is a cultural characteristic, followed by (2) a personality characteristic, (3) mode of data collection, and (4) an item characteristic. The cultural characteristic is determined by the