

# SOCIAL NETWORKS AND STATUS ATTAINMENT

*Nan Lin*

Department of Sociology, Duke University, Box 90088, Durham, North Carolina  
27708-0088; e-mail: nanlin@duke.edu

KEY WORDS: social resources, social capital, social networks, status attainment

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## ABSTRACT

This essay traces the development of the research enterprise, known as the social resources theory, which formulated and tested a number of propositions concerning the relationships between embedded resources in social networks and socioeconomic attainment. This enterprise, seen in the light of social capital, has accumulated a substantial body of research literature and supported the proposition that social capital, in terms of both access and mobilization of embedded resources, enhances the chances of attaining better statuses. Further, social capital is contingent on initial positions in the social hierarchies as well as on extensity of social ties. The essay concludes with a discussion of remaining critical issues and future research directions for this research enterprise.

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## INTRODUCTION

Status attainment can be understood as a process by which individuals mobilize and invest resources for returns in socioeconomic standings. Resources in this context are defined as valued goods in society, however consensually determined (Lin 1982, 1995), and values are normative judgments rendered on these goods which in most societies correspond with wealth, status, and power (Weber 1946). Socioeconomic standings refer to valued resources attached to occupied positions. These resources can be classified into two types: personal resources and social resources. Personal resources are possessed by the individual who can use and dispose them with freedom and without much concern

for compensation. Social resources are resources accessible through one's direct and indirect ties. The access to and use of these resources are temporary and borrowed. For example, a friend's occupational or authority position, or such positions of this friend's friends, may be ego's social resource. The friend may use his/her position or network to help ego to find a job. These resources are "borrowed" and useful to achieve ego's certain goal, but they remain the property of the friend or his/her friends.

The theoretical and empirical work for understanding and assessing the status attainment process can be traced to the seminal study reported by Blau & Duncan (1967). The major conclusion was that, even accounting for both the direct and indirect effects of ascribed status (parental status), achieved status (education and prior occupational status) remained the most important factor accounting for the ultimate attained status. The study thus set the theoretical baseline for further modifications and expansions. All subsequent theoretical revisions and expansions must be evaluated for their contribution to the explanation of status attainment beyond those accounted for by the Blau-Duncan paradigm (Kelley 1990, Smith 1990). Several lines of contributions since, including the addition of sociopsychological variables (Sewell & Hauser 1975), the recast of statuses into classes (Wright 1979, Goldthorpe 1980), the incorporation of "structural" entities and positions as both contributing and attained statuses (Baron & Bielby 1980, Kalleberg 1988), and the casting of comparative development or institutions as contingent conditions (Treiman 1970) have significantly amplified rather than altered the original Blau-Duncan conclusion concerning the relative merits of achieved versus ascribed *personal resources* in status attainment.

In the last three decades, a research tradition has focused on the effects on attained statuses of social resources. The principal proposition is that social resources exert an important and significant effect on attained statuses, beyond that accounted for by personal resources. Systematic investigations of this proposition have included efforts in: (a) developing theoretical explanations and hypotheses; (b) developing measurements for social resources; (c) conducting empirical studies verifying the hypotheses; and (d) assessing the relative importance of social resources as compared to personal resources in the process of status attainment. These investigations have been carried out in North America, Europe, and Asia, in multiple political economies, and have involved scholars of many nations and cultures. The accumulation and advances in theory and research have considerably expanded the intellectual horizon of sociological analysis in status attainment and, thus, in social stratification and social mobility. The purposes of this chapter are (a) to review the theoretical and empirical foundations of these lines of investigation, (b) summarize sampled studies and results, and (c) propose issues and directions for future research.

Before proceeding with the tasks outlined, I wish to identify the limitations of this review. It focuses on resources in the networks; as such, it does not review effects of properties of social networks per se (e.g., densities, centrality, bridging) unless they implicate accessed resources (what influence these characteristics may exert on the access and use of social resources). Second, the outcome of focus is the status attained rather than whether a job search is successful. The latter has a substantial literature of its own and is better summarized elsewhere (e.g., Granovetter 1995). This essay touches on aspects of job searches to the extent that they affect attained statuses. Finally, I am only reviewing the literature available in English. I am aware of an expanding literature in Europe, but unfortunately my language limitations do not allow for such coverage here.

## FORMATIVE STUDIES AND THEORETICAL FOUNDATIONS

Contributions of social network analysis to status attainment can be traced to the seminal study conducted by Mark Granovetter (1974), who interviewed 282 professional and managerial men in Newton, Massachusetts. The data suggested that those who used interpersonal channels seemed to land more satisfactory and better (e.g., higher income) jobs. Inferring from this empirical research, substantiated with a review of job-search studies, Granovetter proposed (1973) a network theory for information flow. The hypothesis of “the strength of weak ties” was that weaker ties tend to form bridges that link individuals to other social circles for information not likely to be available in their own circles, and such information should be useful to the individuals.<sup>1</sup>

However, Granovetter never suggested that access to or help from weaker rather than stronger ties would result in better statuses of jobs thus obtained (1995:148). Clues about the linkage between strength of ties and attained statuses came indirectly from a small world study conducted in a tri-city metropolitan area in upstate New York (Lin et al 1978). The task of the participants in the study was to forward packets containing information about certain target persons to others they knew on first-name basis so that the packets might eventually reach the target persons. The study found that successful chains (those

<sup>1</sup>On the surface, this hypothesis might be seen as simply the inverse of the long-familiar hypothesis that stronger ties are formed among those who share similar characteristics and lifestyles; this is known as the homophily principle or the like-me hypothesis (Homans 1950, Lazarsfeld & Merton 1954, Laumann 1966, Lin 1982). What the strength-of-weak-tie argument contributed, however, was a challenge to the taken-for-granted and attributed value given to strong ties or the homophily principle—strong ties, promoting group solidarity, are socially valuable. By shifting our attention to the weaker ties, Granovetter alerted us that weak ties, promoting access to different and new information, are socially valuable as well.

packets successfully forwarded to the targets) involved higher-status intermediaries until the last nodes (dipping down in the hierarchy toward the locations of the targets). Successful chains also implicated nodes that had more extensive social contacts (who claimed more social ties) and yet these tended to forward the packets to someone they had not seen recently (weaker ties). The small world study thus made two contributions. First, it suggested that access to hierarchical positions might be the critical factor in the process of status attainment. Thus, the possible linkage between strength of ties and status attainment might be indirect: The strength of weak ties might lie in their accessing social positions vertically higher in the social hierarchy, which had the advantage in facilitating the instrumental action. Second, the study implicated behavior rather than a paper-and-pencil exercise, as each step in the packet-forwarding process required actual actions from each participant. Thus, the study results lend behavioral validity to those found in previous status attainment paper-pencil studies.

Based on these studies, a theory of social resources has emerged (Lin 1982, 1990). The theory begins with an image of the macro-social structure consisting of positions ranked according to certain normatively valued resources such as wealth, status, and power. This structure has a pyramidal shape in terms of accessibility and control of such resources: The higher the position, the fewer the occupants; and the higher the position, the better the view it has of the structure (especially down below). The pyramidal structure suggests advantages for positions nearer to the top, both in terms of number of occupants (fewer) and accessibility to positions (more). Individuals within these structural constraints and opportunities take actions for expressive and instrumental purposes. For instrumental actions (attaining status in the social structure being one prime example), the better strategy would be for ego to reach toward contacts higher up in the hierarchy. These contacts would be better able to exert influence on positions (e.g., recruiter for a firm) whose actions may benefit ego's interest. This reaching-up process may be facilitated if ego uses weaker ties, since weaker ties are more likely to reach out vertically (presumably upward) rather than horizontally relative to ego's position in the hierarchy.

Three propositions were thus formulated: (a) the social resources proposition: that social resources (e.g., resources accessed in social networks) exert effect on the outcome of an instrumental action (e.g., attained status), (b) the strength of position proposition: that social resources, in turn, are affected by the original position of ego (as represented by parental resources or previous resources), and (c) the strength of ties proposition: that social resources are also affected by the use of weaker rather than stronger ties. A subsequent variation of the last proposition is the extensity of the proposition: that social resources are affected by extensity of direct and indirect ties (see *Issues and Future Directions*).

## SOCIAL RESOURCES AND SOCIAL CAPITAL: A THEORETICAL CONVERGENCE

Parallel but independent of the development of the social resources theory, another general sociological theory emerged in the late 1970s and early 1980s (Bourdieu 1986, Coleman 1988)—the social capital theory. While social capital may refer to a variety of features in the social structure, according to different scholars (e.g., community norms—Coleman 1990; group solidarity—Hechter 1983, Portes & Sensenbrenner 1993; participation in voluntary and civil organizations—Putnam 1995), it has become clear (Lin 1995, Flap 1996, Tardos 1996, Burt 1997, Portes 1998) that social capital refers primarily to resources accessed in social networks. Further, the theory also focuses on the instrumental utility of such resources (capital as an investment or mobilization). The convergence of the social resources and social capital theories complements and strengthens the development of a social theory focusing on the instrumental utility of accessed and mobilized resources embedded in social networks. It places the significance of social resources in the broader theoretical discussion of social capital and sharpens the definition and operationalization of social capital as a research concept. The three propositions stated above remain valid in the framework of social capital (i.e., the social capital proposition, the strength of position proposition, and the strength of ties proposition). The following discussion reflects the merged notions of social capital and social resources. At the empirical and research levels, social resources are used, whereas at the general theoretical level, social capital is employed.

### RESEARCH MODELS AND EVIDENCE

Research on the relationships between social resources and status attainment examines two processes, as illustrated in Figure 1. One process focuses on the access to social capital—resources accessed in ego's general social networks. In this process, human capital (education, experiences), initial positions (parental or prior job statuses), and ego's social ties (e.g., extensity of ties) are hypothesized to determine the extent of resources ego can access through such connections (network resources). Further, network resources, education, and initial positions are expected to affect attained statuses such as occupational status, authority positions, sectors, or earnings. We may identify this model as the accessed social capital model.

Another process focuses on the mobilization of social capital in the process of status attainment—the use of social contact and the resources provided by the contact in the job-search process. As can be seen in Figure 1, status of the contact used is seen as the mobilized social capital in the status attainment process. It is hypothesized that contact status, along with education and initial po-

sitions, will exert a significant and important effect on attained statuses of the job obtained. Contact status, in turn, is to be affected by education, network resources, and the tie strength between ego and the contact. Strength of ties may be measured either with a perceived strength (e.g., intimacy of relationship) or a role category (e.g., kin, friends, and acquaintances). We shall call this model the mobilized social capital model.

In both types of analyses, other factors may be added to the basic model, including age, gender, race/ethnicity, indications of job experience or tenure, the work sector, and the industry or organization, either as control variables or as opportunity/constraint factors. We turn now to a brief review of the literature, which proceeds first with the mobilized social capital model, as it received initial research attention, followed by the accessed social capital, and models incorporating both access and mobilization processes. A summary of the studies and findings appears in Table 1.

### *Mobilized Social Capital<sup>2</sup>*

The initial empirical examination of the model was conducted by Lin and his associates (Lin et al 1981, Lin et al 1981). The study with data from a representative community sample in metropolitan Albany, New York, of more than 400 employed males confirmed that contact status exerted effects on attained status, beyond and after accounting for parental status and education effects. It also confirmed that contact status was affected positively by father's status and negatively by the strength of ties between ego and contact. The results provided the initial confirmation of all three propositions of the social capital theory. Ensel (1979) extended the investigation to both men and women in a study of employed adults in the state of New York. While confirming that contact status significantly affected attained status, he found that male seekers were much more likely to reach higher-status contacts than were females. Further, women were more likely to use female contacts in job searches while males overwhelmingly used male contacts. When women did use male contacts, their disadvantage in reaching higher-status contacts as compared to men was significantly reduced. The study was one of the first studies providing direct evidence that males, being positioned advantageously in the hierarchy, had better social capital. Secondly, female disadvantages in mobilizing male contacts,

<sup>2</sup>The fact that this estimation procedure only studies a subsample of labor-force participants who use personal contacts in job searches raised concern about the selectivity bias on the estimations. In surveys of community labor populations, anywhere from 20% to over 61% of the job-seekers indicate the use of personal contacts (for a summary, see Granovetter 1995:139-41). Yet, studies of selectivity bias have revealed no major differences in the characteristics of those who used personal contacts as compared to those who used formal channels or direct applications in job searches. Younger and less experienced workers do show a slightly greater tendency to use personal contacts. Thus, most studies have incorporated age and/or work experience as controls to account for possible bias.

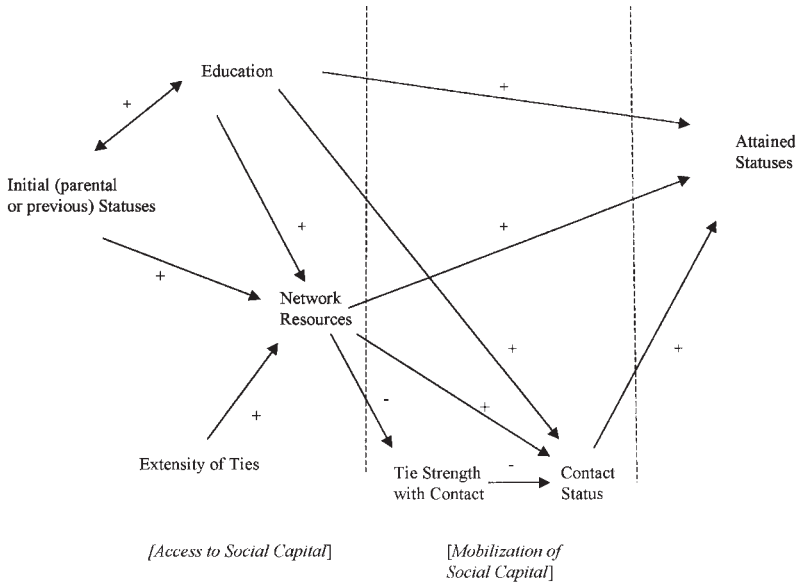


Figure 1 The social capital model of status attainment

and thereby accessing better social capital, accounted in part for their inferior status attainment. Further replication and extension of the model was conducted by Marsden & Hurlbert (1988) with an analysis of the transition to current jobs for 456 men in the 1970 Detroit Area Study. The study confirmed that contact status (occupational prestige and sector) exerted the strongest effect on attained prestige and sector, respectively. They also found that contact's prestige and being in the core sector were respectively related to prestige and sector of prior job, confirming the strength of position proposition. On the other hand, they did not confirm the strength of tie proposition; contact status was not associated with the strength of ties between ego and contact.

Extension of the model to other societies quickly followed. De Graaf & Flap (1988) lend further support to the social resources proposition in their analyses with a sample of 628 males in a 1980 West German survey and 466 males in a 1982 Dutch survey. They did not examine the strength of position or the strength-of-tie propositions for social resources. The Netherlands Family Survey of 1992 provided some data on male-female comparisons in the social capital effect. Moerbeek et al (1995) used father's occupation as the indicator of social capital when the father was mentioned as the social contact, and they found it exerted a positive and significant effect on the statuses of first and current/last jobs for both men and women. Wegener (1991) analyzed a 1987 data set from Germany of 604 men and women aged forty-two and thirty-two

**Table 1** Summary of studies and findings

Study	Social resources effect		
	(outcome var.)	Position effect	Tie effect
<b>MOBILIZED SOCIAL CAPITAL MODEL</b>			
Lin, Ensel & Vaughn (1981, USA)	yes	yes	yes
Marsden & Hurlbert (1988, USA)	yes	yes	no
Ensel (1979, USA)	yes	—	—
DeGraaf & Flap (1988, The Netherlands)	yes	—	—
Moerbeek, Utile & Flap (1996, The Netherlands)	yes	yes	—
Wegener (1991, West Germany)	yes	—	—
Requena (1991, Spain)	no	—	—
Barbieri (1996, Italy)	yes	yes	—
Hsung, Sun & She (1986, Taiwan)	yes	—	—
Hsung & Hwang (1992, Taiwan)	yes	yes	no
Bian & Ang (1997, Singapore)	yes	—	yes*
Volker & Flap (1996, East Germany)	yes	yes*	no
Bian (1997, China)	yes	—	no
<b>ACCESSED SOCIAL CAPITAL MODEL</b>			
<b>Name Generator Methodology</b>			
Campbell, Marsden & Hurlbert (1986, USA)	yes	—	—
Sprengers, Tazelaar & Flap (1988, The Netherlands)	yes	yes	yes*
Barbierer (1996, Italy)	yes	yes	—
Boxman, DeGraaf & Flap (1991, The Netherlands)	yes	—	—
Boxman & Flap (1990, The Netherlands)	yes	—	—
Burt (1992, USA)	yes	—	—
Burt (1997, 1998, USA)	yes*	—	—
<b>Position Generator Methodology</b>			
Lin & Dumin (1986, USA)	yes	yes	yes*
Hsung & Hwang (1992, Taiwan)	yes	—	—
Volker & Flap (1997, East Germany)	yes	yes	yes
Angelusz & Tardos (1991, Hungary)	yes	no	—
Erickson (1995, 1996, Canada)	yes	—	yes*
Erickson (1998, Canada)	yes	—	—
Belliveau, O'Reilly & Wade (1996, USA)	yes	—	—
<b>JOINT ACCESSED/MOBILIZED MODEL</b>			
Boxman & Flap (Boxman 1992; H Flap, E Boxman, unpublished paper, The Netherlands)	yes	—	—
Flap & Boxman (1998, The Netherlands)	yes	—	—
Volker & Flap (1997, East Germany)	yes	—	—
Lai, Lin & Leung (1998, USA)	yes	yes	yes

—: not reported; \*conditional confirmations; detail in text.



and found that contact status significantly affected the prestige of the job found, confirming the social resources proposition. However, the strength-of-ties proposition and the strength-of-position hypotheses were not examined. Barbieri (1996), reporting a study conducted of 500 newly hired persons in the administrative area of Milan, Italy, found that contact status significantly affected present job status, having already accounted for effects from father's status, education, and first and previous job statuses, confirming the social resources proposition. Further, he found that father's status indirectly affected contact status, through education, lending some support to the strength of tie proposition. His model did not include measures of the strength of tie between ego and contact and did not examine the strength of tie proposition. Requena's study in Spain (1991) provided the only disconfirming evidence for the social resources proposition, as it showed that greater social resources did not provide better jobs, even though these did affect the income attainment. He speculated that the lack of social resources effects was in part due to the rigid bureaucratization of Spain's employment policies and practices.

Systematic tests of the theory have been carried out in Asia as well. A series of studies were conducted by Hsung and others in Taiwan, which is also a capitalist state but in another region of the world. One study (Hsung & Sun 1988) surveyed the labor force in the manufacturing industry and another (Hsung & Hwang 1992) examined the labor force in a metropolitan area (Taichung). Both studies supported the social resources proposition: that contact status significantly affected the status of obtained first and current jobs, after accounting for father's education and occupational status, education, and, in the case of current job, prior job status. Hsung & Hwang (1992) also found modest support for the strength-of-position argument, while father's education and occupational status had only a modest effect on contact status for the first job and no significant effect on contact status for the current job. For strength of ties, a composite measure (closeness with contacts, frequency of visits, frequency of calls, and content of relation) indicated only a slightly negative relationship with contact status of the first job and no relationship with contact status of the current job. In addition, Bian & Ang (1997) conducted a study in 1994 of 512 men and women in Singapore that strongly confirmed the social resources proposition: Contact status significantly affected obtained status. Helper status was strongly related to occupational status of the current job, along with age, education, and prior job status. For all respondents, weaker ties reached higher-status contacts. However, the weakest ties (not intimate at all) did not have any effect on contact status, a finding similar to that in the 1988 Tianjin study to be described shortly. For those reaching helpers indirectly, the association between tie strength and contact status was a negative one. However, stronger ties between the intermediary and the helper were more likely to result in reaching a higher-status helper.

A major extension of the research paradigm has examined the propositions in different political economies, such as state socialism. In a 1988 study, conducted in Tianjin, China, including 1,008 men and women, Bian (1997) found that helpers' job status (measured by the hierarchical level of his/her work unit) was strongly associated with attained work unit status in the job change, along with education and prior job status. The overall effect of the tie strength between ego and the helper on the helper's status was insignificant. Further analyses showed that medium-strength ties reached helpers with better status, which was true for the tie strength between ego and the intermediaries as well as the intermediaries and the helpers. Moreover, in a retrospective panel study conducted by Volker & Flap (1996) in Leipzig and Dresden, two cities in the former GDR (German Democratic Republic), the occupational prestige of the contact person had strong and significant effects on both the first job and 1989 job prestige. Thus, the social resources proposition was confirmed. However, strength of ties (measured by intensity of relationship between ego and the contact) had no effect on contact statuses or the attained occupational status and income. Neither father's education nor occupational prestige affected contact status for the 1989 job search. However, education had a significant effect on contact status. Since the father's status had direct effects on education, these results confirmed the indirect effect of the strength of positions, mediated through education.

### *Accessed Social Capital*

Two methods measure accessed social capital: name generators and position generators. The name generator is the more common method and has been used extensively in the network literature. The general technique is to pose one or more questions about ego's contacts in certain role relationships (e.g., neighborhood, work), content areas (e.g., work matters, household chores), or intimacy (e.g., confiding, most intimate, etc). Such questions generate a list of contacts ranging from three to five or as many as volunteered by ego. From these lists, relationships between ego and contacts and among contacts, as well as contacts' characteristics, were generated. Social capital measures are constructed to reflect the contacts' diversity and range in resources (education, occupation) as well as characteristics (gender, race, age). A number of problems are associated with the use of name generators to measure social capital, including variations in distributions being affected by the content or role and number of names. As a result, the data tend to reflect stronger ties, stronger role relations, or ties in close geographic limits (Campbell & Lee 1991).

Position generators, first proposed by Lin and associates (Lin & Dumin 1986), use a sample of structural positions salient in a society (occupations, authorities, work units, class, or sector) and ask respondents to indicate con-

tacts (e.g., those known on first-name basis), if any, in each of the positions. Further, relationships between ego and contact for each position can be identified. Thus, instead of sampling content or role areas, the position generator samples hierarchical positions. It is content free and role/location-neutral. Instead of counting and measuring data from specific names (persons) generated, the position generator counts and measures access to structural positions. An example position-generator instrument is shown in Table 2. The name-generator methodology has been employed in research over a longer period of time, while the position-generator methodology has emerged in more recent studies. The following section reports on the studies and results for each methodology on accessed social capital and status attainment.

**NAME GENERATORS STUDIES** Campbell et al (1986) examined the associations between network resources and socioeconomic statuses with name-generator data from the 1965–66 Detroit Area Study and found that the resource compositions of networks (mean and maximal education, mean and maximal prestige) were significantly associated with attained statuses such as occupational prestige and family income. In the Milan study, Barbieri (1996) also constructed three measures for social capital from name-generator data and found them to affect present job status, after accounting for parental statuses, experience, human capital (years of schooling), and first and previous job statuses. Further, social capital was affected by father’s status, confirming the strength of position proposition (the study did not examine the strength-of-ties proposition).

Several studies have assessed the associations between accessed social capital and attained statuses among certain labor populations. Access to social capital by the unemployed was the focus of the study conducted by Sprengers et al (1988). Among a group of 242 Dutch men aged 40–55 who became unemployed in or before 1978, those with better social capital were more likely to

**Table 2** Position generator for measuring accessed social capital: an example

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Here is a list of jobs (*show card*). Would you please tell me if you happen to know someone (on a first-name basis) having each job?

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Job	1. Do you know anyone having this job?	2. How long have you known this person (no. of years)?	3. What is your relationship with this person?	4. How close are you with this person?	5. His/her gender	6. His/her job
Job A	_____	_____	_____	_____	_____	_____
Job B	_____	_____	_____	_____	_____	_____
Job C	_____	_____	_____	_____	_____	_____
etc.	_____	_____	_____	_____	_____	_____

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\*If you know more than one person, think of the one person whom you have known the longest.

find jobs within a year after unemployment, especially those with access to social capital through weak ties. Those with better social capital did not find a better occupational status or income when they found re-employment. However, better social capital increased optimism about job opportunities, which in turn increased the intensity of the job search, leading to finding more and better jobs. Further, the more restricted the labor market was, the more intense those with greater social capital tended to be in job searches. After a year of unemployment, the ones with better social capital among strong ties (relatives) also tended to have a better chance to be re-hired in the next one to three years. The study also found that those with better education, former occupations, and higher incomes tended to have better social capital, confirming the strength of position hypothesis. Focusing on 1359 top managers of larger companies in the Netherlands, Boxman, De Graaf & Flap (1991) found that both education and social capital (measured with work contacts in other organizations and memberships in clubs and professional associations) had direct effects on income. The job-search activities of 365 persons in the Netherlands who finished vocational training were also studied by Boxman & Flap (1990) in 1989. Data were obtained from job seekers and employers as well as contacts used by the job seekers, and preliminary analyses showed that for income, the more important predictors were gender (in favor of men), social capital, career perspective, and company-specific skills.

Early promotion and better bonuses were the outcomes assessed by Burt (1992) for managers in a large electronic components and computing equipment firm. Using the extent to which each ego was embedded in a constrained network (fewer contacts, more dense relations, and more contacts related to a single contact) as a measure of social capital, he found a negative association between structural constraints and early promotion. That is, there was the suggestion that access to diverse resources in one's networks enhanced the opportunity to locate information and influence useful for promoting one's position in the firm. For men in senior positions in the investment banking division of a large American financial organization, similar negative association between constrained networks and bonuses was found (Burt 1997).

POSITION GENERATORS STUDIES Lin & Dumin (1986) analyzed the data from the Albany study in which a list of 20 occupations was sampled from the US 1960 census listing of occupations, with all occupations ranked according to the job prestige scores. Then, at equal intervals on the job prestige scale scores, occupations were identified. From the group of occupations at the sampled interval, the most popular (frequency of occupants) occupation was selected. Each respondent was asked if he had any contact (person with whom on first-name basis) in each of the positions. If more than one contact was indicated, they were asked to focus on the most familiar one. For each accessed

position, the respondent identified the contact's relationship (relative, friend, or acquaintance). From the data matrix, Lin & Dumin constructed two social resources access measures: the highest status accessible (the position accessed with the highest prestige score) and the range of statuses accessed (difference between the highest and lowest accessed statuses). Analyses showed that the two measures were positively and significantly related to current occupational status. Further analysis showed that respondents' original positions (father's occupational prestige score or white collar–blue collar and high-low occupational groupings) and these two measures were related positively and significantly, confirming the strength of position hypothesis. When they analyzed the relationships between the three types of ties (relatives, friends, acquaintances) and the access variables, they found that friends as well as acquaintances provided the best access to both the highest status position and the range of accessed statuses.

Hsung & Hwang (1992) also incorporated network resources in their Taichung study, as cited earlier. Adapting the position generator methodology with 20 occupations, they failed to find significant effects for the highest status accessed and for the difference between the lowest and highest occupational statuses accessed. However, they did find significant effects on the first job status of a measure of "the total amount of network resources" that was based on the sum status scores of all occupations accessed. This measure, however, did not have any effect on current job status.

Volker & Flap (1996), in their East Germany study, used the position generator methodology to ask respondents to identify, among 33 occupations, whether they knew anyone in any of the occupations, and if so, what their relationships were (relatives, friends, and acquaintances). For 1989 occupational status, the effect of the highest status accessed was positive and significant, while controlling for father's education and occupation, the respondent's own education and sex, and the prestige of their first job. This variable also had a positive and moderately significant ( $p < .10$ ) effect on 1989 income, when 1989 occupational prestige was added to the equation along with all other independent variables for 1989 job prestige. This result confirmed the social resources proposition. Further, Volker & Flap found that both relatives and acquaintances accessed better occupations (upper-white, or higher prestige) than did friends. On the other hand, acquaintances did access a greater range (difference between the highest and lowest prestige jobs) of occupations than did either relatives or friends. Since the highest occupational prestige accessed turned out to be the best predictor for attained status, the effects of weak ties were not found (as relatives and acquaintances were almost equally likely to access high-prestige occupations). The father's occupational prestige was positively related to the highest occupation prestige accessed in general as well as for each group of occupations accessed through relatives, friends, and ac-

quaintances. Thus, the strength of position proposition was confirmed. In pre-1989 Hungary (1987–1988), Angelusz & Tardos (1991) also used the position generator to identify “weakly tied” relations or resources. This variable was found to be significantly associated with wages, after accounting for the effects of sex, education, residence, and age.

In her study of 161 licensed guard and investigator firms in Toronto in 1991–1992, Erickson (1995, 1996) used Wright’s (1979) class dimensions (control of property, control of organizations, and control of skill) to select 19 job positions. Data were gathered from 154 employers, 46 supervisors, 80 managers, and 112 owners. She found that social capital (diversity in accessing various positions) contributed to cultural capital, job autonomy, and authority, which in turn generated better job returns. For becoming an owner, network diversity made a more direct and significant contribution. In another study on social capital, Erickson (1998) differentiated two types of social capital: global and local. Local settings refer to geographic areas (neighborhoods), ethnic areas (ethnic communities and enclave economies), or organizations (schools, voluntary organizations, social movements, or firms). In a telephone survey with a sample of 352 participants in the Toronto LETS (Local Employment and Trading System), Erickson asked the respondents to identify contacts in a list of 30 occupations, both in and outside the LETS system. Analyses showed that global social capital was associated with global (age, gender—being female, education, and employment status) variables and local social capital with local activities (time in LETS, markets and swaps attended in LETS, social events, and steering committee meetings attended in LETS).

### *Joint Effects of Accessed and Mobilized Social Capital*

Since there are two types of social capital in the process of status attainment, a logical step would be to examine accessed and mobilized social capital in a single study. The theoretical question posed is the extent to which accessed social capital facilitates and mobilizes social capital: that is, whether having more accessed social capital increases the likelihood of mobilizing better social capital. The structural opportunity and advantage implied in this hypothesis is apparent. However, it is also to be expected that the correspondence should not be overwhelming—not all persons accessed with rich social capital are expected to take advantage or be able to mobilize social capital for the purpose of obtaining better socioeconomic status. An element of action and choice should also be significant. Several studies have lent support to this hypothesis.

Flap & Boxman (H Flap, E Boxman, unpublished paper), for example, in their study of vocational training graduates showed that contact status (mobilized social capital) affected attained occupational status, whereas accessed social capital did not. The East Germany study (Volker & Flap 1996) is an-

other study in which both accessed and mobilized social capital were measured. It was found that the highest occupation prestige accessed in the position-generator methodology was significantly and positively related to the status of the contact person used in the 1989 job search, but its direct effect on the 1989 job prestige, while positive, was only modest in significance ( $p < .10$ ). The contact person's prestige had a much stronger effect. In fact, its direct effect on 1989 job prestige was stronger than education, once the first job prestige was also incorporated (and was the most significant predictor).

Lai et al (1998) also examined the joint effects of accessed and mobilized social capital on status attainment with the Albany data (Lin et al 1981). Incorporating both the network resources measures from the position generator (Lin & Dumin 1986) and the contact resources (contact status in the job search) in structural equation models, they showed that current job status was significantly and directly affected by education (achieved status) and contact status. Contact status was, in turn, affected by parental statuses (ascribed status), education, network resources, and weaker ties with the contact. Thus, it is clear that mobilized social capital directly influences status outcome, and mobilized social capital is affected by accessed social capital, along with ascribed and achieved statuses.

## ISSUES AND RESEARCH DIRECTIONS

Research has provided consistent support to the proposition that social capital, in the form of social resources, makes a significant contribution to status attainment beyond personal resources. This association persists across societies (different nation-states and political economies), industrialization and development levels, populations in the labor market (recent graduates, new hires, job changers), different sectors in the economy (industries, organizations, positions in organizations), or status outcomes (occupation, authority, sector, promotion, bonuses). The association remains significant across differential conceptualization (accessed versus mobilized capital) and measurement (name generators versus position generators). Yet, there remain important issues to be conceptualized and studied in the future. In the following, a number of these are briefly identified and discussed.

### *Informal and Formal Channels of Job Search*

It is clear by now that use of informal channels by itself offers no advantage over other channels, especially formal channels, in attained status. In fact, if anything, informal channels tend to be used by the disadvantaged: females, the less educated, and the less skilled. The statuses attained therefore tend to be lower. Yet, among those who use informal channels, social resources (statuses

of the contacts) make a major difference. Several issues remain. First, is it really true that the advantaged do not need to use informal channels, as they possess greater human capital and can apply directly to high-status positions? The evidence is mixed. For some jobs that have specific job requirements (dealing with technology and hardware, for example), credentials regarding skills and training in the formal application may be sufficient to obtain the positions. However, for other critical jobs (high-level managers and human-interfaced positions), formal credentials often are insufficient to convey the social skills and resources so essential for occupants' performances. The necessary informal or shadow channels through which such information is conveyed, yet not detected in survey instruments, remain an important methodological challenge. Secondly, for the disadvantaged, social capital is restricted (the strength of position argument). Within this restricted range of resources, there is little information as to whether the disadvantaged are also less likely to mobilize the optimal resources available to them, thus creating double jeopardy. Knowledge about the choice behaviors of the advantaged and the disadvantaged will be helpful in sorting through the structural constraints and choice constraints.

### *Strength or Extensivity of Ties?*

While the social resources proposition and the strength-of-position propositions have been consistently confirmed (see Table 1), much ambiguity has resulted regarding the strength-of-ties proposition. Strength of ties in and of itself should not be expected to exert a direct effect on status outcomes (Granovetter 1995), and much research evidence points to the absence of a direct association (e.g., Bridges & Willemez 1986, Marsden & Hurlbert 1988, Forse 1997). The modified proposition that weaker ties might access better social resources also lacks consistent empirical support (see Table 1). Yet, social capital is theorized to contain both structural effects and agency effects; further specifications of network or the choices within structural constraints may eventually turn out to be meaningful. Several lines of investigation have provided some leads. For example, it has been argued that the effect of strength of ties on social resources accessed or mobilized may be contingent on the original status. Some studies have pointed to the ceiling effect of the tie strength: At or near the top level of the hierarchy, it is the strong ties that tend to yield successful job attainment (Lin et al 1981, Erickson 1995, 1996). Also, the weakest ties are clearly not useful (Bian 1997, Bian & Ang 1997), since ties with no strength offer no incentive for exchanges. On the other hand, the strongest ties, by the same token, may be useful despite the restricted range of resources accessed. They, by definition, represent commitment, trust, and obligation and, therefore, the motivation to help. Willingness and effort to search other ties by these strong ties may be critical under institutional uncertainties or con-



straints (e.g., under state socialism, Bian 1997, Rus 1995; or tight market situations, Sprengers et al 1988). Organizational constraints and opportunities may also condition the relative utility of weaker or stronger ties (Lin 1990).

An alternative route of theorizing the network effects on social capital shifts the focus from the strength of ties to extensity of ties. There is persistent evidence that extensity or size of network ties are significantly related to richness or diversity in social resources (e.g., Lin & Dumin 1986, Angelusz & Tardos 1991, Burt 1997). Having both strong and weak ties enhances extensity of networks, and extensive ties afford better opportunities for individuals to locate the resources useful for instrumental actions. Thus, we may propose an *extensity-of-ties proposition*: the more extensive the networks, the better social resources to be accessed and mobilized.

### *Further Development of the Position Generator*

In order to ascertain the causal sequence, the time framework of the contacts needs to be specified. For example, the generator may wish to indicate that “when you were looking for the first (or current) job, did you know of anyone who had this kind of work?” Also, it is important to sample the positions from a meaningful hierarchy in a given society. In addition to occupational status or prestige, work units, sectors, authority, or autonomy may confer important statuses in certain societies. Catering to the significance of meaningful statuses/classes in a given society is thus an important consideration in identifying the positions in the generators (Erickson 1995).

### *Inequality of Social Capital*

Differential access to social capital deserves much greater research attention. It is conceivable that social groups (gender, race) have different access to social capital because of their advantaged or disadvantaged structural positions and social networks. Thus, for example, inequality of social capital offers less opportunities for females and minority members to mobilize better social resources to attain and promote careers. For the disadvantaged to gain a better status, strategic behaviors require accessing resources beyond the usual social circles [for example, females use male ties (Ensel 1979) to find sponsors in the firm (Burt 1998) and join clubs dominated by males (Beggs & Hurlbert 1997); or for blacks to find ties outside their own neighborhood or with those employed (Green et al 1995); or for Mexican-origin high schoolers to find ties of nonMexican origin or to establish ties with institutional agents such as teachers and counselors (Stanton-Salazar & Dornbusch 1995, Stanton-Salazar 1997)]. Systematic data will enhance our understanding of the inequalities in social capital as an explanatory framework for inequality in social stratification and mobility and behavior choices to overcome such inequalities.

### *Recruitment and Social Capital*

The relationships between social capital and status attainment apply to both supply and demand sides of the labor market. So far, research literature has primarily concentrated on the supply side—the status attainment process from job-seekers' perspective. The demand side of the model—the recruitment process from the organization's perspective—has only begun to emerge (Boxman & Flap 1990, Boxman et al 1991, Burt 1997, Erickson 1995, 1996, Fernandez & Weinberg 1996). There are reasons to believe that social capital is important for firms in selective recruitments, as firms must operate in an environment where social skills and networks play critical roles in transactions and exchanges. This is especially true of certain types of positions. Thus, we may anticipate that certain positions require more social capital than other positions in a firm. First, top-level executives are expected to possess rich social capital, as they need to deal and manage people both within and outside the firm. In fact, we may postulate that at the highest level of management, social capital far outweighs human capital for occupants. Thus, it can be hypothesized that firms such as IBM and Microsoft may be more likely to recruit experienced managers with social skills than with computer expertise for their CEOs, and that top universities need presidents who have the social skills to negotiate with faculty, students, parents, and alumni and to raise funds rather than to produce distinguished scholarship. Secondly, we should expect positions that deal with persons (e.g., nurses) rather than machines or technologies (e.g., programmers) to be filled with occupants with better social capital. Third, positions at the edge of the firm are more likely to be filled by those with better social capital than others (e.g., salesperson, public relations, or managers at remote sites) (Burt 1997). Firms with more needs for such positions, therefore, should be expected to use informal sources in recruitments more extensively. Such hypotheses will help empirical specifications and testing.

### *Social Capital versus Human Capital*

The relationship between social capital and human capital is theoretically important. Some scholars (Bourdieu 1986, Coleman 1990) have proposed that social capital helps produce human capital. Well-connected parents and social ties can indeed enhance the opportunities for individuals to obtain better education, training, and skill and knowledge credentials. On the other hand, it is clear that human capital induces social capital. Better educated and better trained individuals tend to move in social circles and clubs rich in resources. The harder question is: Given both, which is more important in enhancing status attainment? Several studies cited in this chapter suggest that social capital may be as important or even more important than human capital (education, and work experience) in status attainment (Lin et al 1981, Marsden & Hurlbert

1988), while others show the opposite (DeGraaf & Flap 1988, Hsung & Sun 1988, Hsung & Hwang 1992). Industrialization probably is not the explanation, as the former group includes studies conducted in the United States, and the latter the Netherlands and Taiwan. More likely, it suggests an association between specific educational institutions and methods of job allocations and searches. As Krymkowski (1991) showed in a comparative analysis of data from the United States, West Germany, and Poland in the 1970s, both West Germany and Poland showed greater associations between social origins and education and between education and occupational allocations than did the United States. Yet, there is no clear evidence that the educational system in Taiwan resembles the West German and Dutch systems more than the US system. The contrasting results from these countries thus remain to be explained.

Still more intriguing is possible interactions between human capital and social capital. Boxman et al (1991) found that human capital had its greatest effect on income when social capital was low and that human capital had its least effect on income when social capital was high. Further, in the study of Dutch managers, Flap & Boxman (1998) found that for top managers, social capital helped to earn more income at any level of human capital, but the returns of human capital decreased at higher levels of social capital. If these patterns can be confirmed, they would suggest that human capital supplements social capital in status attainment. That is, when social capital is high, attained status will be high, regardless of the level of human capital; and when social capital is low, human capital exerts a strong effect on attainment. Or, given certain minimal levels of human and social capital, social capital is the more important factor in accounting for status attainment.

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