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Paving an Alternative Route: Gender Differences in Managerial Networks*

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This research uses the network-analytic concepts of homophily, tie strength, and range to explore gender differences in characteristics of middle managers' information and career support networks. When the effects of position and potential for future advancement were held constant, women's networks were less homophilous than men's. Women high in advancement potential, however, relied to a greater extent than both high-potential men and less high-potential women on close ties and relationships outside their subunits. On the basis of these findings, we suggest that different types of networks may provide alternative routes to similar career resources for men and for women.

Despite numerous empirical studies of gender differences in social networks over the past decade (e.g., Brass 1985; Burt 1992; Campbell 1988; Ibarra 1992; Moore 1990), researchers have only begun to examine what types of networks support women's career advancement and whether they differ from those which support men's careers. Few empirical studies, however, have investigated the networks of managerial women (Burt 1992 is an exception) or have explored network characteristics such as tie strength and range in the workplace. Given the frequently suggested link between informal relationships and women's advancement to the executive level (Morrison, White, and Velsor 1987), an understanding of gender and networks is of theoretical and practical importance.

In this paper I explore two research questions: In what ways, if any, do the networks of managerial men and women differ? What mechanisms produce those differences? Previous studies took into account the impact of occupation, job, and managerial level (Brass 1985; Ibarra 1992; Moore 1990), but the effects of other situational factors on workplace networks remain relatively unexplored. Here I consider how demographic constraints on the availability of same-gender contacts (Ibarra 1992) and the dynamics of interpersonal attraction (Baron and Pfeffer 1994; Kanter 1977; O'Leary and Ickovics 1992) shape networks by structuring opportunities for interaction with different types of people and affecting the nature of cross-gender relationships. I counter arguments that networks are shaped by men's and women's differing interpersonal preferences, and suggest instead that multiple structural factors produce gender differences in managerial networks.

NETWORK STRUCTURE AND INSTRUMENTAL RESOURCES

In this paper, managerial networks are defined from a focal individual's (i.e., egocentric), perspective as the set of relations defined by the individual and his or her job-related contacts with others. Through network links flow valued resources including diverse and useful information, referrals, resources, and support. Some benefits derive directly from particular one-on-one relationships; others are products of structural or aggregate features of the network, which determine the novelty of information and the opportunities for brokerage and control (see Smith-Lovin and McPherson 1992 for a review of network concepts). The networks investigated here involve the exchange of job-related resources including information and career support or advice. The term instrumental benefits therefore refers to resources in the service of meeting job demands, furthering career development, or both.
I use three sets of network-analytic concepts to explore gender differences in managerial networks: homophily, tie strength, and range. Homophily refers to the tendency of individuals who interact to be similar on given attributes such as gender or race (McPherson and Smith-Lovin 1987), and is used here to refer to same-gender ties. Following Marsden and Campbell (1984), I use the terms tie strength and closeness interchangeably to refer to the emotional intensity of a relationship, regardless of the frequency of interaction (Granovetter 1973). Range pertains to the diversity of groups represented by an individual’s contacts (Burt 1983; Marsden 1990). In this paper, it refers to the extent of network contact outside the primary organizational group. Range is a structural characteristic, whereas homophily and tie strength are properties of dyadic relationships. At an aggregate level, however, personal networks may be distinguished by the extent to which they are dominated by homophilous ties, and by whether the ties tend to be close and binding relationships rather than weaker, more superficial links lacking in emotional investment.

Homophily, tie strength, and range are related because they share the notion of access to diverse resources. Weak ties are more likely than strong ties to link dissimilar individuals, to serve as bridges to disconnected parts of a social system, and therefore to provide access to novel information (Granovetter 1973). People linked by strong ties, by contrast, are more likely to be interconnected; thus the information transmitted is more likely to be redundant. The consensus to date is that weak ties and broader range provide greater instrumental benefits than their opposites. Weak ties are instrumental in finding jobs (e.g., Boxman, DeGraaf, and Flap 1991; Granovetter 1982; Lin, Ensel, and Vaughn 1981), and people whose network contacts extend beyond their required work-flow interactions, immediate work groups, or work units tend to be more powerful and more mobile (Blau and Alba 1982; Brass 1984; Burt 1992). Few studies have explored the relationship between homophily and access to instrumental resources. In studies of women’s workplace networks, however, this connection must be considered because homophily and status of contacts tend to be correlated positively for men and negatively for women (Ibarra 1992).

GENDER AND WORKPLACE NETWORKS

Two theoretical perspectives have dominated the debate on gender differences in managers’ behavior (see Riger and Galligan 1989 for a review). Proponents of a dispositional perspective argue that a variety of individual attributes and behaviors are manifestations of fundamental or socialized gender differences and account for the principal obstacles facing women in the workplace. Because women are socialized to emphasize relational over instrumental concerns, their approaches to network development may not be geared toward success in the male business world. Situational theorists, by contrast, argue that gender differences in relationship patterns are explained most accurately as responses to constraints and interaction dynamics arising from structural features of the situation, especially, men’s predominance in positions of power and opportunity (Kanter 1977). The situational perspective is supported by findings that structural variables such as rank (Ibarra 1992), work group affiliation (Brass 1985), or occupation (Aldrich, Reese, and Dubini 1989; Moore 1990) explain much of the variance in network centrality or composition. Following this line of research, this study explores the multiple network implications of a situational approach.

Homophily

Structuralists have argued that the sex composition of groups and organizations constrains the extent of network contact between men and women coworkers (Blau 1977). Thus the gender composition of informal networks must be viewed as a product of the availability of different types of contacts, rather than as the result of preferences for homophily based on interpersonal attraction. McPherson and Smith-Lovin (1987) distinguished between induced homophily, which is the result of availability, and choice homophily, resulting from preferences for interaction with like others; The latter can be ascertained only after considering induced homophily. Research on workplace networks supports this distinction. Ibarra (1992) found that men’s networks were predominantly homophilous, regardless of tie content, whereas women tended to seek advice and influence from ties to men while
maintaining information links and social support through informal interaction with women.

Although few have studied the career consequences of homophily, Brass (1985) argued that homophilous networks were more detrimental for women than for men because men tend to control the promotion decision-making process. Alternatively, research on mentoring suggests that same-gender ties are necessary channels for accurate information and “psychosocial” benefits such as role modeling (Kram 1988). In this study, given the dearth of previous research, I make initial inquiries about the extent to which women in similar managerial positions differ in choice homophily; I suggest that a balanced mixture of ties to men and to women is more likely to provide an array of network benefits than contacts drawn predominantly from either group.

Tie Strength

Theories positing that women prefer close, reciprocal relationships to weaker instrumental links lead to the expectation that their instrumental networks will include higher proportions of strong ties than men’s. Although little empirical evidence in this domain has been offered, Aldrich (1989) suggested potentially detrimental consequences: Because networks composed of strong ties tend to be more homogeneous than those in which weak ties predominate (Campbell, Marsden, and Hulbert 1986), a relational orientation may produce networks that are limited in the diversity of groups represented, thus inhibiting women’s access to career resources. Structuralists also have viewed a reliance on strong ties as undesirable, but argue that a lack of opportunity rather than gender is the cause of such ties. A lack of opportunity leads people to develop informal relationships for protection and reassurance and to focus on personal relationships rather than on task accomplishment, while people with greater opportunity develop instrumental networks to further their career goals (Kanter 1977). Recent research, however, has asked whether the same types of networks prove equally instrumental for men and for women.

Differences in the availability of same-gender contacts and in the interaction dynamics that augment the effects of structural factors such as demography (Kanter 1977; Miller 1986) merit consideration. When we take these differences into account, it appears that strong ties may be more instrumental for women than for men in that they mitigate the effects of interpersonal dissimilarity (Ibarra 1993) and the attribution biases that are more prevalent in superficial relationships (Berger et al. 1977). Burt (1992) supports this perspective; he found that men and women managers differ not in network structure but in the relationship between network structure and speed of career mobility. Men’s mobility was fostered by ties to unconnected parties; by contrast, women were not fully trusted in organizational inner circles and therefore required strong ties to strategic partners to signal their legitimacy and contribute to their advancement. In a related vein, various studies have suggested that men are more able than women to convert human capital, external ties, and formal authority into network centrality (Ibarra 1992; Miller 1986; Miller, Lincoln, and Olson 1981). Following this line of inquiry, I explore whether gender or the interaction of gender with structural factors such as advancement potential accounts more accurately for differences in the strength of workplace ties.

Range

Moore (1990) found that men and women in professional and managerial jobs have nonkin networks that are similar in the diversity of groups represented, including ties to coworkers, neighbors, and fellow club or church members. Few studies of workplace networks, however, have considered the diversity of groups represented. Brass (1985) found that women with ties to coworkers outside their immediate groups were more likely to be promoted. Ibarra (1993) argued that women may respond to the limited availability of homophilous contacts by reaching beyond the immediate work groups or functional areas to establish informal contact with other women. Therefore, where managerial women are found in small numbers, broad-ranging networks—although desirable in general—also may offer greater benefits to women than to men by linking them to peer and senior women in other subunits. Consequently, in this paper I explore gender differences, as well as differences within the subgroup of women, in the extent of cross-boundary network interaction.
In sum, this study uses the concepts of homophily, tie strength, and range to compare the personal networks of men and women who occupy equivalent middle management positions but who differ in their assessed potential to advance to the executive level. In exploring how gender and opportunity for future career advancement interact in their effects on network structure, my objective is to investigate whether women’s networks show evidence of efforts to counteract the two primary obstacles—interpersonal discomfort and gender bias—created by men’s numerical dominance in positions of power and authority. These efforts include the strategies of building closer instrumental ties to increase interpersonal comfort and attenuate gender bias, and cultivating extragroup relationships to gain access to advice on success strategies for women. The study is descriptive and exploratory; I focus on differences in network characteristics, and reserve for future research any prescriptive statements about the relationship between network characteristics and outcomes such as effectiveness and advancement.

METHOD

Research Sites and Participants

I conducted this research in four Fortune/Service 500 firms. The four sites were divisions or business units of large, mature bureaucratic organizations operating in different industries (telecommunications, pharmaceuticals, automobiles, and photographic products) and geographical regions. Approximately 30 to 40 percent of the managers at the sites were women, a figure consistent with current assessments of Fortune 500 demographics (Korn/Ferry 1992).

Study participants were 63 middle-level managers: 38 men and 25 women. Because previous research suggests that most gender differences in networks are explained by occupation or hierarchical rank (Ibarra 1992; Moore 1990), my research strategy was to control for both by selection. Each company had a different grade-level structure; therefore I ensured comparability across companies by discussing specific responsibilities and their positions relative to the bonus-eligible, executive ranks of their divisions. To include a proxy for potential for future advancement, I asked the participating firms to select a subsample of managers who had been placed on a “fast-track” or high-potential program. These programs are part of each firm’s formal succession-planning process: Individuals are nominated by their supervisors and their subunits’ Human Resource Management staff on the basis of performance to date and potential to advance to the executive ranks; final selections are made in consultation with senior executives in the division. Of the 63 participants, 20 men and 16 women belonged to the high-potential subgroup.

Because only a limited number of women across the four firms were identified as having high potential, and because of the exploratory nature of this study, I decided against random selection. Instead, I consulted human resources representatives at each site; they identified high-potential women who met the positional requirements outlined above, and matched them with high-potential men and nonhigh-potential men and women in similar jobs. Forty eight and 47 percent of high and nonhigh-potential managers respectively held line jobs; 52 and 45 percent of all the women and all the men, respectively held such jobs. The men and women did not differ in tenure, time in current position, fast-track participation, holding staff versus line jobs, or education (T-values [df = 61] = 1.22, .89, .88, .56, and .26 respectively; all n.s.).

Data Collection

During a 90-minute one-on-one interview with me, respondents listed their network contacts in two domains: (1) information: (people “who have been valuable sources of information for you in your current job”) and (2) career (people “who have contributed most to your professional growth and development . . . who have taken an active interest in and concerted action to advance your career”). In their lists of career contacts, participants were asked to differentiate between current (active) and past relationships; the analyses reported here concern only the former. As in Holland and Leinhardt (1973), respondents were not restricted to a fixed number of nominations. This feature, along with network questions constructed to elicit typical patterns of interaction (e.g., “people who have been sources of information” rather than “people who have provided you with information this week”), facilitated individu-
als’ capacity to recall and report their network links accurately (Marsden 1990).

I used the names generated as the basis for open-ended interview questions about participants’ approaches to developing their networks. I also asked the women whether they sought out contact with other women. After the interview, I asked the respondents to provide information about each contact, including demographic and organizational information: sex, race, organizational affiliation, hierarchical rank, frequency of interaction, and closeness to each. The questionnaire was modeled after the network segment of the General Social Survey (Burt 1984).

Measures and Variables

Network measures. The network questionnaire provided the raw data I used to operationalize three network measures: homophily, closeness, and range. I operationalized homophily as the proportion of same-gender contacts relative to the total. Closeness was operationalized as the proportion of “very close” relationships (choices were “very close,” “close,” “less than close,” and “distant”). Range was a factor-analytic combination of two variables that measured interaction outside the participants’ primary groups: frequency of interaction, operationalized as the average amount of contact with the people they listed (choices were “daily,” “weekly,” “monthly,” or “less often”), and extragroup contact, the proportion of total ties to people outside the participants’ divisions or operating groups.

Closeness and frequency of contact are both elements of Granovetter’s (1973:1361) definition of tie strength, but Marsden and Campbell (1984) found that they reflect different underlying dimensions; closeness is the more accurate indicator of tie strength. Frequency of interaction, by contrast, is more closely associated (negatively) with the range of the network, defined as the proportion of a respondent’s contacts who belong to groups other than the respondent’s (Campbell et al. 1986). That association exists because high frequency of interaction often serves as a proxy for a network characterized by heavy intragroup interaction or contact with physically proximate groups. In my data, frequency and external group contact were correlated negatively because members of the same departments or project teams tended to work in physical proximity. Thus frequency of contact served as a finer-grained indicator of interaction outside the primary workgroup but within the larger subunit captured by the “extra-business unit contact” variable.

Gender and advancement potential. Gender and potential are dummy variables, with values of 1 assigned to men and to nonhigh-potential managers.

Control variables. Race is a dummy variable, with a value of 1 assigned to whites. I also coded education as a dummy variable (0 = college degree; 1 = graduate degree) because all participants had college degrees. Tenure was operationalized as years in the organization. I used a set of three dummy variables to control for company-specific effects, because the four firms differed on a variety of factors including industry, performance, and organizational culture; I included them to ensure that network effects could be observed net of company effects that I did not measure directly.

Data Analysis

Data analysis consisted of ordinary least squares regressions with homophily, closeness, and range (computed separately for information and career networks) as depen-
dent variables. The independent variables were gender, advancement potential, and a gender-by-potential interaction term. I conducted the analyses in two steps. The first step detected whether main effects for gender or potential were significant, with controls for education, company tenure, race, and company. In the second step I introduced the gender-by-potential interaction term. Because the gender and the potential dummy variables were coded with values of 1 assigned to men and to nonhigh-potential managers, high-potential women made up the reference category. Thus the significance of the regression coefficient for the variable “potential” constitutes the test for the difference between high-potential (HP) and nonhigh-potential (NHP) women, and the significance of the regression coefficient for the variable “gender” constitutes the test for the difference between HP men and women (Jaccard, Turrisi, and Wan 1990). The analyses reported here do not test for differences between HP and NHP men. Because of space limitations, the interview data are used only to illustrate the quantitative findings.

RESULTS

Homophily

Table 2 reports results of regressing homophily on gender and potential. (Means, standard deviations, and intercorrelations for all variables are reported in Table 1.) The highly significant main effects for gender show, as might be expected given the firms’ demographics, that men have more homophilous information and career contacts than women. The gender-by-potential interaction (see the second line of each regression) indicates parallel findings in the comparison of HP men’s and women’s information ties (P < .01; estimated values of .32 homophilous ties for HP women and .65 for HP men) and career ties (P < .001; estimated values of .10 for HP women and .76 for HP men).

High-potential women, however, also had a significantly higher proportion of same-gender career and information ties than the NHP women (P < .05; estimated values of .13 and —.07 respectively for NHP women’s information and career ties.) Given that both groups of women developed their networks in the same demographic context, the significant difference may be viewed as evidence of choice rather than induced homophily.

Some anecdotal evidence for this argument may be gleaned from the women’s responses to an interview question asking whether they sought out other women as network contacts. NHP women were much more likely than HP women to respond that gender was not a consideration in seeking and establishing ties, to mention that they avoided women’s networks, or to report seeking out women primarily for friendship and social support. None of the NHP women reported seeking women out for instrumental purposes such as asking for political information or career advice. Half of the HP women, by contrast, reported seeking out other women for instrumental resources, in particular learning from other successful women about interpersonal and behavioral strategies for overcoming gender-related obstacles. None of the HP women said that they avoided networking with women. Table 3 provides examples of the three categories of interview responses: do not seek out women, seek out women for social support, and seek out women for instrumental resources.

Table 1. Means, Standard Deviations and Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>1. Gender</td>
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<td>.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Potential</td>
<td>.73</td>
<td>.45</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Network</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Homophily</td>
<td>.61</td>
<td>.41</td>
<td>.88***</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Closeness</td>
<td>.20</td>
<td>.26</td>
<td>-.05</td>
<td>.01</td>
<td>-.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Range</td>
<td>.00</td>
<td>1.00</td>
<td>.03</td>
<td>-.19</td>
<td>-.14</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td>Information Network</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Homophily</td>
<td>.65</td>
<td>.30</td>
<td>.71***</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Closeness</td>
<td>.17</td>
<td>.18</td>
<td>-.21</td>
<td>-.10</td>
<td>-.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Range</td>
<td>.00</td>
<td>1.00</td>
<td>.21</td>
<td>-.10</td>
<td>.07</td>
<td>.09</td>
<td></td>
</tr>
</tbody>
</table>

* P < .05; ** P < .01; *** P < .001.
Table 2. Gender Differences in Homophily, Closeness, and Range

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Constant</th>
<th>Gender</th>
<th>Potential</th>
<th>Gender × Potential</th>
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</thead>
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<tr>
<td>Career Network</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homophily</td>
<td>-.00**</td>
<td>.74***</td>
<td>.02</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>.10**</td>
<td>.66***</td>
<td>-.17**</td>
<td>.22** (.11)</td>
</tr>
<tr>
<td>Information Network</td>
<td>.22**</td>
<td>.41***</td>
<td>.04</td>
<td>—</td>
</tr>
<tr>
<td>Homophily</td>
<td>.32**</td>
<td>.33***</td>
<td>-.19**</td>
<td>.23* (.12)</td>
</tr>
<tr>
<td>Career Network</td>
<td>.12**</td>
<td>-.01</td>
<td>.00</td>
<td>—</td>
</tr>
<tr>
<td>Closeness</td>
<td>.29**</td>
<td>-.12</td>
<td>-.23**</td>
<td>.34** (.15)</td>
</tr>
<tr>
<td>Information Network</td>
<td>.17**</td>
<td>-.07</td>
<td>.03</td>
<td>—</td>
</tr>
<tr>
<td>Closeness</td>
<td>.23*</td>
<td>-.13**</td>
<td>-.06</td>
<td>.15 (.10)</td>
</tr>
<tr>
<td>Career Network</td>
<td>.25</td>
<td>-.12</td>
<td>.33</td>
<td>—</td>
</tr>
<tr>
<td>Range</td>
<td>-.24</td>
<td>.25</td>
<td>1.18***</td>
<td>-1.19** (.56)</td>
</tr>
<tr>
<td>Information Network</td>
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<td>-.44*</td>
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<td>—</td>
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<tr>
<td>Range</td>
<td>-1.93***</td>
<td>.73**</td>
<td>.66</td>
<td>.87 (.55)</td>
</tr>
</tbody>
</table>

Notes: gender is 0 = female, 1 = male. Potential is 0 = high-potential, 1 = non-high-potential. Control variables are education, tenure, race, and company dummies. Unstandardized regression coefficients reported.
* P < .05; ** P < .01; *** P < .001 (one-tailed test).

Closeness

Table 2 also reports results of regressing closeness on gender and potential. Contrary to the expectations expressed in the dispositional perspective, the nonsignificant main effects for gender suggested that women were no more likely than men to have a higher proportion of close ties in either the career or the information network. Nor were strong ties associated with stalled career opportunity: NHP managers were no more likely than HP managers to rely on strong ties. Adding the interaction term for gender by potential produced different results for each network. In the information network, HP women had a higher proportion of very close ties than HP men (P < .01; estimated values of 23 and 10 percent respectively) but did not differ from the NHP women. Results for the career network indicated that NHP women tended to have fewer very close ties than the others (P < .05, estimated values of .06, .29, .17 respectively for NHP women, HP women, and HP men). The difference between HP

Table 3. Sample Quotes from Interviews

Different Views on Networking with Other Women:
"I have worked with women and have generally had good relationships with most of them. But I haven’t gone out of my way to try to specifically network with [other women] because I don’t want to be seen as traveling in a pack."
"There are very few women with whom to network. I look for women more for friendship than professional contact in my division."
"I found it very useful [to network with senior women], because I learn a lot of techniques for dealing with difficult situations. . . . I’m the only woman manager in my organization. Since I don’t see [other women] daily, I have to take deliberate steps to stay in touch."

Strong and Weak-Tie Network Approaches:
"I try to avoid networking as developing long-term relationships. If I need something quickly I don’t want to jeopardize the long-term relationship. I try not to be pushy; [I] offer to assist them as well. I want people to want to interact with me again. . . . It is important [to develop relationships with] people who are not two-faced, who I can depend, on and who are pleasant to work with."
"I develop the network contacts I need to get the job done, period. If I don’t need them, I don’t talk to them."
men and women, however, was not significant.

Interview responses to the question “What kinds of people do you develop relationships with?” provided additional support for HP women’s greater reliance on strong ties, relative to the other groups. Sixty-seven percent of the HP women, compared with 15 percent of the HP men and 11 percent of the NHP women, emphasized the importance of close ties based on trust, reciprocity, and a “genuine relationship” in describing their network development approaches. HP men and NHP women, by contrast, were more likely to report a transactional approach, expressing more concern for establishing ties necessitated by task requirements than for the nature of the relationship. Table 3 contains examples of responses I coded respectively as strong- and weak-tie approaches.

Range

The final set of analyses, reported in Table 2, consisted of regressing range on gender and potential. The main effect for gender suggests that women were more likely than men to develop information contacts outside their groups. Analyses including the interaction term, however, showed that this was largely a function of the difference between HP men and HP women. The HP women had wider-ranging information networks than HP men (P < .01; estimated values of −1.9 and −1.2 for HP women and HP men, with lower numbers indicating greater extragroup contact) but did not differ from the NHP women. The career network results suggest that HP women had more extragroup network ties than NHP women, whose networks ended to be based within their subgroups (P < .01; estimated values of −.24 and .94); in this regard, however, they did not differ from HP men.

To explore the link between range and homophily for women, I deconstructed the range variable to examine the gender composition of women’s ties outside the business unit. Fifty-one percent of the HP women’s extrabusiness unit information ties were to women, in contrast to 14 percent for the NHP women. None of the NHP women had external career ties to women. Examples of the HP women’s homophilous external ties included functional peers in different subunits, senior women in other divisions, and corporate staff specialists who served as informants or sounding boards. Although I did not ask specifically about external relationships in the interviews, women’s comments about instrumental ties to other women tended to refer to external relationships (see the third quote in Table 3 for an example).

DISCUSSION

When the effects of position and potential for future advancement were held constant, women’s career and information ties were less homophilous than men’s. An interaction of gender by advancement potential, however, accounted for differences in closeness and range. The results for the career network, which indicated that NHP women differed from the others in their poverty of close and extragroup ties, are consistent with previous research on correlates of career advancement (Brass 1985; Kram 1988; Thomas 1990). The results for the information network, however, which indicated that HP women differed from HP men in having closer and broader-ranging information network ties, suggested that women may need greater quantities of the resources provided by close and external ties, or may need them in a broader array of network types. These findings are consistent with various research streams indicating that different approaches provide alternative routes to similar network resources for men and for women (Burt 1992; Ibarra 1992; Miller 1986). One cannot argue from these data that network characteristics caused women to be identified as high-potential—because identification occurred before the measurement of network characteristics—but the implications of these interaction effects (summarized in Table 4) are discussed in greater detail below.

| Table 4. Results Summary: Differences Between HP Women and Others |
|--------------------------|--------------------------|
| Career Network           | HP Men | NAP Women |
| Homophily                | Less      | Greater    |
| Closeness                | N.S.      | Greater    |
| Range                    | N.S.      | Greater    |
| Information Network      |           |            |
| Homophily                | Less      | Greater    |
| Closeness                | Greater   | N.S.       |
| Range                    | Greater   | N.S.       |
Network Characteristics

Homophily. The highly significant gender differences in homophily of both networks are consistent with previous findings (Aldrich et al. 1989; Ibarra 1992) and with theories stressing the effects of organizational demography in constraining opportunity for network interaction (Blau 1977). These results are not inconsistent with Brass’s (1985) finding that nonsupervisory men and women had equally homophilous workplace networks, because the proportions of men and women at that level were equivalent. That high-potential women relied more strongly than non-high-potential women on same-gender ties substantiates McPherson and Smith-Lovin’s (1987) distinction between induced and choice homophily. The lower homophily of both HP and NHP women, relative to that of the men, may be viewed as evidence of induced homophily, because both groups of women worked in similar demographic contexts. The HP women’s higher proportion of same-gender ties, however, relative to those of the NHP women, may be interpreted as evidence of choice homophily.

In light of women’s statistical underrepresentation in positions of power and authority, such choices may seem counterintuitive. Yet the qualitative data clarify a critical career function: When women are underrepresented in managerial and professional ranks, homophilous ties play a key role in gaining advice from others who have faced similar obstacles and have received similar psychosocial supports such as rolemodeling (Kram 1988). With the present data, we cannot determine whether non-high-potential women ignored this critical source of career support or, alternatively, were less attractive as proteges and exchange partners for influential women in other divisions. As suggested by the interview comments on whether they sought out network ties to women, the former is likely to be at least a partial explanation.

Closeness. As Cook and Emerson (1978: 737) observed, “[I]t would be tempting to invoke the extensive literature which attributes to females a higher level of interpersonal orientation as opposed to the task orientation typically attributed to males” to explain the HP women’s greater reliance on close ties. But the contrast between the high-potential and the non-high-potential women makes it difficult to attribute these results to gender differences in interpersonal orientations or to a generic power difference between men and women. Although a similar causal explanation cannot be made easily with my method, these findings are consistent with Burt’s (1992) hypothesis that networks dominated by strong ties are potentially detrimental for men, but beneficial for women in compensating for their lower status and legitimacy in the managerial world.

If gender is viewed as a status characteristic (Ridgeway 1991), this interpretation for my findings is consistent with Granovetter’s (1982) conclusion that weak ties are less advantageous for people in economically or socially “insecure” positions. The mechanism, following Krackhardt (1992:218), is women’s greater need for the benefits provided by strong ties: “a base of trust that can reduce resistance and provide comfort in the face of uncertainty.” If that is the case, one might speculate that the NHP women were unable or did not know how to develop the types of relationships that would allow them to establish trust and credibility. Of course the HP women’s relationships may have “strengthened” after they were identified as high-potential, but the fact that a similar phenomenon is not evident in the HP men’s networks suggests again that women may need greater sponsorship.

Social psychological research indicates that different interaction strategies are effective for men and for women because they are expected to conform to expectations concerning gender-appropriate interaction styles (Carli 1989; Falbo, Hazen, and Linimon 1982; Wiley and Eslikson, 1982). This research suggests another potential mechanism that may explain the observed interaction effect: From a normative standpoint, strong ties may signal the concern for the quality of interpersonal relationships that is expected of women. In sum, these results suggest that strong ties may help women to counteract the effects of bias, gender-typed expectations, and contested legitimacy. Further research and theory development are needed to sort out the causal order and to determine the range mechanisms that produce contingent effects by gender.

Range. High-potential women differed from HP men in having wider-ranging information networks. Although my data did not allow me to explore more directly the relationship between range and homophily,
this finding is best explained by taking into account the consequences of choice homophily: If few women are to be found in middle management and above, women must cross unit boundaries in order to form homophilous ties. This interpretation is consistent with recent findings that minority members’ support networks span a broader range of groups than those of whites, as a result of their relationships with other members of minorities located outside their departments and firms (Ibarra 1995; Thomas 1990). Organizational demography therefore affects personal networks not only directly but also indirectly, by shaping the nature of alternatives (Ibarra 1993). In this case, demography appeared to force a choice between dispersed homophilous contacts and within-group cross-gender ties.

The wider range of HP women’s information networks, relative to those of HP men, appears to depart from Burt’s (1992) findings that nonredundant ties (i.e., to unconnected contacts) fostered mobility for men but not for women. Differences in operationalizations, however, make it difficult to compare the results of the two studies. Burt’s measure of nonredundancy, although conceptually related to range, combined several indicators including closeness, frequency, and density of ties across a variety of instrumental and expressive (i.e., friendship) network types. Further, Burt did not report whether women’s redundant contacts were located inside or outside their subunits, nor did he report the contacts’ gender. Further research is needed to investigate my hypothesis that induced and choice homophily play a significant role in producing interaction effects such as these. The difference in the pattern of findings for information and career support networks also indicates a need for further study to establish what kinds of networks are most subject to such effects.

**Limitations and Research Implications**

The most significant limitation of this study is due to the cross-sectional design. Because of this design is impossible to discern whether differences in women’s networks were the result of differences in opportunity or the reverse. Further, being labeled “high-potential” entails a degree of corporation wide visibility that increases the scope of high-potential individuals’ networks, relative to those of nonfast-track individuals. It is clear, however, that these results provide little support for the dispositional perspective, which required finding significant main effects for gender in the closeness and range analyses. Similarly, the lack of significant main effects for advancement potential suggests that low power and low opportunity do not suffice as primary explanations for reliance on strong-tie networks.

In addition, great caution is needed in generalizing from a small, nonrandomly selected sample. The pattern of results reported here is consistent with findings from a randomly selected group of men and women (Burt 1992), as well as with a broader set of studies suggesting that women must use different means than men to attain desired outcomes (e.g., Carli 1989; Falbo et al. 1982). Even so, the findings of this study should be treated as exploratory and as providing promising causal hypotheses that must be tested more systematically with a larger database.

Finally, selecting research sites for greater demographic variance is a necessary next step in testing the emergent hypothesis that the availability of homophilous contacts moderates the relationship between network structure and its consequences? In most business contexts, men and women differ in their opportunities for informal interaction with high-status, same-gender others (Ibarra 1992). In addition, “female” is a lower ascribed status than “male” (Berger et al. 1977; Ridgeway 1991); women’s power positions are less legitimate than men’s (Molm 1986); and different expectations concerning appropriate behavior are communicated to men and to women (O’Leary and Ickovics 1992). Consequently men and women holding structurally equivalent formal positions may be viewed as operating in different social contexts that require different network approaches to accomplish similar career objectives.

**REFERENCES**


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