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How Experience and Network Ties Affect the Influence of Demographic Minorities on Corporate Boards

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This study examines how the influence of directors who are demographic minorities on corporate boards is contingent on the prior experience of board members and the larger social structural context in which demographic differences are embedded. We assess the effects of minority status according to functional background, industry background, education, race, and gender for a large sample of corporate outside directors at Fortune/Forbes 500 companies. The results show that (1) the prior experience of minority directors in a minority role on other boards can enhance their ability to exert influence on the focal board, while the prior experience of minority directors in a majority role can reduce their influence; (2) the prior experience of majority directors in a minority role on other boards can enhance the influence of minority directors on the focal board, and (3) minority directors are more influential if they have direct or indirect social network ties to majority directors through common memberships on other boards. Results suggest that demographic minorities can avoid out-group biases that would otherwise minimize their influence when they have prior experience on other boards or social network ties to other directors that enable them to create the perception of similarity with the majority.●

Corporate governance experts have long advocated greater demographic diversity among corporate boards of directors. Boards have traditionally been viewed as a homogenous group of elites who have similar socioeconomic backgrounds, hold degrees from the same schools, have similar educational and professional training, and, as a result, have very similar views about appropriate business practices (Domhoff, 1970; Useem, 1984). In recent years, institutional investors and other shareholder activists have increasingly pressured firms to appoint directors with different backgrounds and bases of expertise, under the assumption that greater diversity should improve board decision making (Useem, 1993). TIAA-CREF and several other major pension funds have filed blanket resolutions with companies that require them to create boards "composed of qualified individuals who reflect a diversity of experience, gender, and race" (Browder, 1995; Forbes, 1995). For instance, a large chemicals firm was pressured to add directors with experience in other industries and a background in marketing or finance rather than engineering, while also appointing more women and ethnic minorities (Rosenberg, 1994). It is routinely claimed or assumed that such demographic diversity should lead to less insular decision-making processes and greater openness to change (Gormley, 1996; Kotz, 1998). According to the president of TIAA-CREF, "people with diverse backgrounds contribute unique perspectives that greatly enrich discussions of critical issues" (Biggs, 1995: 17).

Partly in response to pressure from institutions, boards have increased demographic diversity across a range of characteristics. Many boards made up largely of industry insiders, or individuals with a particular functional background, have appointed directors from outside the industry with experience in other functions, and the representation of women and racial minorities on boards has also gradually increased in

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recent years (Heidrick and Struggles, 1996; Kotz, 1998; Daily, Certo, and Dalton, 1999). Thus, while most boards still have clear demographic majorities, they also often have demographic minorities for a range of characteristics, including industry and functional background, education, race, and gender.

Moreover, since the early 1980s, the representation of outside, or non-employee, directors on corporate boards of U.S. companies has increased significantly (Westphal and Zajac, 1997). Outside directors now represent a large majority of the average corporate board. Although this change was expected to improve board decision making by infusing fresh ideas (Useem, 1993), research has shown that increases in the ratio of outside to inside directors do not necessarily improve decision making or performance (e.g., Walsh and Seward, 1990; Davis and Greve, 1997; Westphal, 1998). This realization led institutional investors to advocate greater board diversity, under the assumption that outside directors may not have contributed unique insights to decision making because, as a group, they were demographically similar to insiders and thus had similar perspectives on strategic issues.

While the presence of demographic minorities on boards is typically viewed favorably by corporate stakeholders, the academic literature on organizational demography and social conformity is more pessimistic about the extent to which demographic minorities can successfully influence group decision making. A central tenet of this literature is that demographic differences lower social cohesion between group members and that these social barriers reduce the likelihood that minority viewpoints will be incorporated into group decisions (e.g., Nemeth, 1986; O'Reilly, Caldwell, and Barnett, 1989; Smith et al., 1994; Hambrick, Cho, and Chen, 1996). In this study, we question whether this predominant view of minority influence is overly pessimistic or whether demographic minorities can avoid social barriers that would otherwise minimize their influence when they have prior experience on other boards or network ties to other directors that may enable them to create the perception of similarity with the majority.

Sociologists and social psychologists have defined demographic minorities in different ways. Some sociologists have restricted the definition of a minority to include only subgroups that receive unequal treatment in the larger society (Wirth, 1945). In this study, we adopt the concept of minority used in the social psychological literature on minority influence. From this perspective, the term minority refers to an individual who has a salient attitude, belief, or social feature, such as a demographic characteristic, that is possessed by less than 50 percent of the group (Moscovici and Faucheux, 1972; Nemeth, 1980). This definition has also been adopted by sociologists such as Schermerhorn (1970) and Smith (1987). It recognizes the potential for minority status to vary across situations and over time, depending on the immediate social context. For instance, although women directors may be disadvantaged in many situations, they can actually have in-group status on boards composed mostly of women.

Research on minorities has shown that minority group members have the potential to stimulate divergent thinking in the decision-making process. This involves offering unique perspectives that change the conventional wisdom in the group by stimulating others to question assumptions that have implicitly guided their reasoning (Moscovici and Faucheux, 1972; Nemeth, 1986; Laughlin, 1992). Recent research suggests that the mere presence of a minority who is accepted into the group can prompt divergent thinking, not only about the primary topic of conversation but on related topics as well (Crano and Chen, 1998). Thus, minorities can stimulate other board members to consider a wider range of potential solutions (Nemeth, 1986). When the majority of group members share a particular functional background (e.g., finance), for instance, influence exerted by a director with a different background (e.g., marketing) can lead board members to change or expand the criteria used to evaluate strategic alternatives (Hitt and Tyler, 1991). The literature on organizational demography and top management teams also suggests that groups composed of demographically dissimilar members have the potential to generate original approaches to intellectual and decision-making tasks (McGrath, 1984; Bantel and Jackson, 1989; Williams and O'Reilly, 1997).

These literatures further suggest, however, that demographic minorities face potential barriers to exerting influence. The social psychological conception of minority status is grounded in social impact theory (Latane and Wolf, 1981), which predicts that, all else being equal, individuals who have majority status on a salient attitude, belief, or social feature have the potential to exert a disproportionate amount of influence in decision making (Maass and Clark, 1984). Research has shown that majority group members often resist the influence of minorities (for a review, see Tanford and Penrod, 1984). Such resistance can extend beyond simple disagreement to include nonverbal signals that communicate disapproval of the minority and, in some cases, more extreme responses such as ostracism or derision (Moscovici, 1985; Nemeth and Kwan, 1987).

The social psychological dynamics underlying resistance to minority influence can be understood in terms of intergroup relations (Maass and Clark, 1984; Turner, 1987). Individuals construct social identities by classifying themselves and others into social categories, with salient demographic characteristics providing a primary basis for categorization (Jackson, Stone, and Alvarez, 1992; O'Reilly, Williams, and Barsade, 1997). Through this process, demographic minorities may be categorized as out-group members by the majority, and possibly even by the minority itself. From this perspective, social identity is multidimensional, in that group members may be categorized as in-group members according to one social feature and out-group members on another characteristic (Turner, 1987; Stangor et al., 1992; Kramer, 1993). As Tsui, Egan, and O'Reilly (1992: 556) noted, self-categorization theory suggests that "individuals often have multiple (and sometimes conflicting) identities within the organization." They give the example of a young male employee in a work unit with predominantly older male workers who

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"may find the unit to be both attractive (resulting from self-categorization based on sex) and unattractive (resulting from self-categorization based on age)" as a group affiliation, and the older male employees would have similarly opposing reactions to the young employee (Tsui, Egan, and O'Reilly, 1992: 556). Self-categorization theory would suggest that age and gender represent two separate "psychological groups" that independently contribute to the employee's status in the organization (Turner, 1987: 52). The relative salience of different psychological group memberships may vary over time, depending on the social context and topic of discussion in the group (Brewer, 1991; Kramer, 1991).

Research has documented a variety of biases and other negative outcomes from in-group/out-group categorization. Individuals evaluate the competence of out-group members more negatively and are more likely to apply negative stereotypes to them (Tajfel, Sheikh, and Gardner, 1964; Miller and Brewer, 1996). For instance, out-group categorization may prompt directors with a marketing background to stereotype directors having a finance background as "number crunchers" who lack an understanding of the customer. More generally, out-group biases should lead majority directors to dismiss or devalue the input of demographic minorities on the board (Mackie, 1987). Experimental research has provided evidence for "positive bias in processing a majority message and negative bias in processing a minority message" (Erb et al., 1998: 621). Such bias can occur even when the basis for minority status is minimal or arbitrary (Tajfel, 1982). Thus, out-group biases can limit the potential for minority board members to contribute to board decision making by challenging the conventional wisdom of the majority.

DEMOGRAPHY AND INFLUENCE

Early research in the similarity-attraction paradigm hypothesized that individuals would be evaluated less favorably and would achieve less social standing in the group to the extent that they are demographically different from other group members (Byrne, Clore, and Worchel, 1966; Baskett, 1973; Kanter, 1977). Group members are thought to favor similar others because similarity on a social attribute provides mutual reinforcement or "consensual validation" of attitudes and beliefs that underlie the attribute, while reinforcing the value of the attribute itself (Byrne, Clore, and Worchel, 1966: 223).

More recently, research on relational demography has distinguished between perceived similarity and actual demographic similarity, showing how the tendency for demographically different individuals to receive less favorable evaluations and to become socially marginalized from group decision making is reduced when alternative bases for similarity are made salient (e.g., Pulakos and Wexley, 1983; Kraiger and Ford, 1985; Turban and Jones, 1988). Similarly, while demographic differences between group members can provide a basis for out-group biases in the group, such biases may be avoided when other attitudes, beliefs, or social features that group members have in common are made salient (Kramer, 1991; Huo et al., 1996; Erb et al., 1998). Thus, social barriers to minority influence may be minimized when alternative bases

for in-group categorization (i.e., identities that all group members share) are made salient to members of the majority. If alternative bases of in-group categorization and social similarity are created between minority and majority directors, such perceived similarity may enhance the influence of minority directors in strategic decision making.

Prior Experience and Minority Influence

Prior experience of the focal director. Research on small-group behavior has shown that the ability of minority group members to exert influence hinges on the particular influence styles that they adopt (cf. Moscovici, 1985; Nemeth, 1986). From the perspective of self-categorization theory, in-group/out-group biases are more likely to emerge between majority and minority directors to the extent that demographic differences are salient. The literature on minority influence in small groups suggests that minority group members can avoid or minimize out-group biases by "highlighting similarities" between themselves and majority members (Volpato et al., 1990; Ragins, 1997: 12; Erb et al., 1998; Kaplan and Wilke, 2000). Minority members can reduce the salience of demographic differences by shifting the attention of majority members to beliefs, attitudes, or social features they have in common. Research has shown that minority group members are more influential when they highlight common objectives that all group members share (Moscovici, 1985). In the present context, an effective minority influence style would involve framing an argument with reference to strategic or personal goals that directors have in common. For instance, if minority and majority directors all own stock or have stock options outstanding, a minority director might preface his or her argument by emphasizing that "we are all shareholders here, and we all have an interest in choosing a strategic option that will engender a positive stock market response. . . ."

From a self-categorization perspective, this tactic highlights an alternative basis for in-group identification (e.g., shareholder status) that eclipses the salience of demographic differences between directors. As noted by Tsui, Egan, and O'Reilly (1992: 556), "salience refers to 'conditions under which [an identity] becomes cognitively prepotent in self-perception to act as the immediate influence on perception and behavior' (Turner, 1987: 54)." To the extent that minority directors increase the cognitive prepotence of a superordinate category that encompasses all board members, majority directors are more likely to treat minority directors like in-group members (Gaertner et al., 1990; Kramer, 1991; Huo et al., 1996). Perceived similarity increases social cohesion in groups, and when similarities between group members are made salient, individuals are evaluated more positively by others (Byrne, Clore, and Worchel, 1966; Wayne and Liden, 1995; Williams and O'Reilly, 1997). Thus, by increasing the salience of common objectives, demographic minorities can make majority directors more receptive to their influence.

Directors may learn the value of this approach through their prior experience as a minority member on other boards. Direct, personal experience in similar situations is a powerful

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and perhaps necessary way to learn appropriate influence styles and is particularly important to learning relatively tacit and informal role behaviors (Mischel, 1973; Bandura, 1976), such as interpersonal influence tactics that lead to effective minority influence. The literature on interpersonal influence suggests that people learn how to “manipulate similarity” from prior experience in roles that require such influence tactics (Cialdini, 1993: 143). Cialdini described how car salespeople learn through training and on-the-job experience to look for interests that they have in common with customers and then invoke those common interests just prior to making their sales pitch (see also Pfeffer, 1992).

Through prior experience, directors may develop an appreciation for their role as a minority director (e.g., their potential to offer novel perspectives that challenge dominant assumptions), while learning how to frame their message in a way that makes other board members receptive to them. By contrast, directors who have more experience as a majority member on other boards may have become accustomed to the very different role played by a majority member.¹ Prior studies have shown that majority members are more likely to provide supportive influence, which entails supporting and building on the ideas of others, rather than defining and defending an opposing argument that challenges the conventional wisdom (Doms and Van Avermaet, 1985; Laughlin, 1992). Directors with more experience as a majority member may have developed an influence style that is incompatible with the requirements for minority influence. They may also have become accustomed to receiving social validation of their input from other board members, leaving them ill-prepared to cope with the derision often laid upon minority members (Nemeth, 1986).

This is also consistent with the broader social learning literature (Bandura, 1976; Gioia and Manz, 1985). People develop cognitive scripts and schemas for appropriate behavior in a given context (e.g., boards) from their experience. If they have extensive experience in a particular role within that context (e.g., majority group member), the behavioral scripts associated with the role become more deeply ingrained and are more likely to be invoked, perhaps unconsciously, in different roles (e.g., minority group member) (Gioia and Manz, 1985). Thus, while experience in a particular role can enhance performance in that role, it can detract from performance in other roles that require different forms of influence. Accordingly, when directors are accustomed to presenting their arguments and receiving positive feedback without first manipulating similarity with other members by highlighting common interests, they may be more easily discouraged and thus less effective than directors who lack prior experience in a majority role.

Overall, prior experience in a minority role should help directors minimize the out-group bias facing directors in a minority position, enhancing their ability to influence board decision making, but minority directors who have prior experience in a majority role may have developed an interpersonal style that is inappropriate to their role, impairing their ability to exert influence. This leads to two initial hypotheses linking a minor-

¹ This situation would arise, for instance, if a director has a finance background while most other directors have a marketing background, but the director has prior experience on several other boards where most directors had the same (finance) background.

ity director's prior experience in a minority versus majority role on other boards to their ability to influence decision making on the current board:

Hypothesis 1a: The greater a director's prior experience in a minority role on other boards, the more positive the relationship between minority status on the focal board and the director's influence over decision making on the board.

Hypothesis 1b: The greater a director's prior experience in a majority role on other boards, the more negative the relationship between minority status on the focal board and the director's influence over decision making on the board.

Prior experience of other, majority directors. While a minority director's prior experience in a minority role on other boards is one factor that can help avoid out-group biases and enhance the director's influence over board decision making, minority influence may also depend on the prior experience of other, majority directors. Majority directors may be more likely to empathize with minority directors, and less likely to label them psychologically as out-group members, when the majority members have considerable experience in a minority role themselves. In these cases, they may be more open to the influence of minority members.

According to self-categorization theory, although demographic differences provide one basis for psychological group categorization, self-categorization can occur for other salient attributes as well. Miller and Brewer (1996) have suggested that, through experience, individuals may come to recognize higher-order, relational categories that encompass more social information. For instance, as individuals acquire experience in a particular role, they may increasingly recognize that role as a meaningful basis for self-categorization and, thus, as an element of their social identity. As discussed above, successful minority involvement requires a particular influence style and has different effects on decision making than majority influence. Thus, as directors become conscious of their minority status and learn to appreciate the distinct role requirements and consequences of minority influence through their experience as a minority director, the role itself becomes a salient and meaningful basis for self-categorization and social identity. This can be viewed as a higher-order social identity, in that it generalizes across demographic characteristics (i.e., minority status can derive from different characteristics).

Accordingly, this self-categorization perspective would suggest that when a majority director on the focal board has considerable prior experience as a minority director on other boards, he or she is more likely to identify with minority directors on the focal board. Common experience as a minority director (on different boards) provides a basis for in-group categorization, eclipsing the effect of simple demographic differences between people. In effect, majority directors who come to identify with the minority role through experience would be more likely to see themselves as similar to minorities on the focal board. The homophily literature has shown that people tend to empathize with others who they perceive

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to be similar to them (Byrne, 1971; Wellman and Wortley, 1990). Thus, for instance, if a director with a marketing background has majority status on the current board, but he or she also has extensive prior experience on boards comprising primarily directors with finance backgrounds, then he or she is more likely to empathize with directors who have minority status on the focal board (e.g., directors with finance backgrounds). Moreover, to the extent that directors come to identify with the role of minority influence, such empathy should generalize across demographic characteristics: directors who have prior minority experience on one characteristic (e.g., functional background) are more likely to empathize with racial or gender minorities, directors who have different industry backgrounds, and so forth. Therefore, out-group biases toward minority directors should be lower when other majority directors have extensive minority experience on other boards. In the absence of such biases, majority directors are more likely to welcome their input and seriously consider their ideas, while also accepting minorities into the social in-group. This suggests the following hypothesis:

Hypothesis 2: The greater the prior experience of other, majority directors in a minority role on other boards, the more positive the relationship between minority status on the focal board and the director's influence over decision making on the board.

Social Capital and Minority Influence

Shared memberships on other boards may provide another basis for common social categorization between majority and minority directors. Network theorists have suggested that social ties between individuals that extend across different contexts (e.g., on different boards) will lead to particularly high levels of social cohesion (Emirbayer and Goodwin, 1994). Where individuals have common memberships on multiple other boards with each other, they have more shared experiences and a stronger basis for mutual identification (Coleman, 1988; Belliveau, O'Reilly, and Wade, 1996). Further, the greater familiarity resulting from such ties may lead majority members to make more individuated assessments of minority directors (Gaertner et al., 1989; Messick and Mackie, 1989), reducing the tendency toward negative stereotyping associated with out-group categorization. Individuation has been described as a biased process in which people tend to notice attributes of others that are similar to their own self-image (Fiske and Taylor, 1991; Tajfel, 1981). The mutual identification and individuation resulting from common board appointments increases the perceived similarity of minority and majority directors, which should promote in-group biases that make majority directors more receptive to the influence of minorities (Mackie, 1987; Erb et al., 1998).

Indirect network ties between majority and minority directors may also provide a basis for social cohesion, reducing the likelihood or at least the salience of out-group categorization. In this case, an indirect tie is formed between a minority director A and a majority director B when A sits on another board with a third director C who also sits on a different board with B. When minority and majority directors have more ties in common, they are more likely to view each

other as members of the same social network. Common membership in the same network can provide an alternative basis for group categorization, offsetting out-group status from demographic differences with in-group status from common network ties. Mutual ties further enhance perceived social similarity, which increases mutual acceptance and attraction (Byrne, Clore, and Worchel, 1966; Westphal and Zajac, 1995).

Network theory would also suggest that an indirect tie (i.e., a tie between A and B through C) will lead the majority director B to attribute characteristics of C to the minority director A (Kilduff and Krackhardt, 1994). According to balance theory, since the third-party director will typically have majority status, indirect ties will often lead majority directors to apply characteristics (i.e., positive stereotypes) associated with the majority to the minority director (Granovetter, 1973; Krackhardt and Porter, 1985; Kilduff and Krackhardt, 1994). Network theorists have suggested that indirect social ties can enhance one's confidence in the capabilities of another person by virtue of his or her association with a known third party (Granovetter, 1985; Portes and Sensenbrenner, 1993; Gulati and Westphal, 1999). Third-party ties can also provide information about minority directors that prompts a more individuated assessment of their characteristics. Given that individuation tends to increase perceived similarity, third-party ties should minimize out-group categorization and negative stereotyping.

Out-group bias on boards may also manifest itself as concern among corporate leaders about whether minority members, or directors who voice dissenting opinions, can be trusted to support their leadership, especially in the face of growing pressure from institutional investors to discipline management for poor performance. The social validation provided by third-party ties may be particularly effective in allaying concerns about whether minority directors might bow to external pressures and seek to discipline or scapegoat inside directors for performance problems. The homophily literature also suggests that perceived similarity, which is enhanced by third-party ties, should tend to increase mutual trust (Kanter, 1977; Lincoln and Miller, 1979). Accordingly, such ties should reduce the tendency for corporate leaders to marginalize demographic minorities in board decision making. Overall, minority directors who have stronger connections to majority directors through third-party ties or common memberships on other boards are less vulnerable to out-group categorization by majority directors. This enhances their social integration into the board and their ability to exert influence. In fact, when third-party ties to majority members are particularly strong, minority status may increase rather than decrease the director's influence, as majority directors recognize the director's unique knowledge and perspective as a vital asset rather than as a threat to their leadership. In effect, minority directors are more dependent than majority directors on social capital to gain influence over strategic decision making. This suggests the following hypotheses:

Hypothesis 3a: The more common board memberships between a director and other, majority directors, the more positive the relation-

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ship between minority status on the focal board and the director's influence over decision making on the board.

Hypothesis 3b: The more third-party board ties between a director and other, majority directors, the more positive the relationship between minority status on the focal board and the director's influence over decision making on the board.

METHOD

Sample and Data Collection

The population for this study included outside directors of large- and medium-sized U.S. companies, as listed in the Forbes 500 index of industrial and service firms. The effective sample includes outside directors who responded to a questionnaire survey of top managers and board members distributed in April 1995. Although surveys of top managers have often had low response rates, we took several steps to increase the response rate (Forsythe, 1977; Groves, Cialdini, and Couper, 1992; Fowler, 1993): (1) we used pretest responses to revise the survey, making it easier to complete; (2) we noted in the cover letter that this study was part of an ongoing series of surveys that had been conducted by a major business school, while also noting that hundreds of their peers had responded to prior surveys (see Groves, Cialdini, and Couper, 1992); and (3) a second wave of questionnaires was sent to nonrespondents three weeks after the initial mailing. Directors who sat on more than one board in the sample frame were asked to respond for only one company, which was randomly selected and specified in the cover letter. Out of 1,312 outside directors, 564 responded (43 percent), which is a high response rate in comparison with other surveys of corporate elites (cf. Pettigrew, 1992). Data on demographic characteristics were unavailable for 38 of the respondents, leaving a final sample of 526 responding directors.

We checked for nonresponse bias by collecting archival data for the larger sample frame and examining differences between respondents and nonrespondents using the Kolmogorov-Smirnov test (Siegel and Castellan, 1988). The results provided consistent evidence that respondents and nonrespondents came from the same population. For example, respondents and nonrespondents did not differ significantly with respect to age, tenure on the board, board ties to majority members, or stock ownership, and the companies represented in the sample were not significantly different from other Forbes 500 firms in sales, board composition, or performance; *p*-values ranged from .212 to .891. Overall, these tests provided strong evidence that sample selection bias is not present in the data.

We obtained data on board memberships, director characteristics, ownership, board structure and composition from *Standard and Poor's Register of Corporations, Directors, and Executives*; *The Dun and Bradstreet Reference Book of Corporate Management*; *Who's Who in Finance and Industry*; and corporate proxy statements. A large consulting firm provided additional data on directors' ethnicity. Data on firm and industry characteristics, including firm size, performance, and

industry concentration came from the COMPUSTAT Business Segment Database and *Compact Disclosure*.

Dependent Measure

The dependent measure in this study assesses director influence on strategic decision making by the board. We refined the measure by conducting a pretest that involved detailed interviews with 22 top managers and directors (Fowler, 1993). We used feedback from participants to ensure that questions were interpreted correctly and to improve the wording of the questions, while also simplifying the instructions and improving the format of the larger survey. The director-influence scale included multiple response formats, and individual items were spread throughout the survey to reduce response bias (DeVellis, 1991).

Items in the director-influence scale assess the degree to which directors feel that they contribute to board discussions on strategic issues, as well as their overall perceived influence or impact on strategic decision making by the board (e.g., "To what extent do you influence strategic decision making?"). The pretest interviews suggested that directors consistently interpreted items in the influence scale as referring to their influence on corporate strategy. Cronbach's alpha for this scale was .89, suggesting acceptable interitem reliability (Nunnally, 1978). We applied factor analysis to the survey items, using the iterated principal factors method. A scree test indicated one common factor, and promax rotation verified that all items loaded on the same factor as expected, with loadings for each item greater than .5. Thus, factor scores were estimated, using the Bartlett method.

To assess further the construct validity of this measure, we conducted several additional analyses. We assessed predictive validity by examining the relationship between director influence and longevity on the board. Qualitative research suggests that directors who make fewer contributions to strategic decisions are more likely to leave the board, voluntarily or involuntarily, than relatively influential directors (Spencer, 1983; Lorsch, 1989). We examined whether directors in the survey sample remained on their boards during the two-year period following the survey date. Director influence was significantly and positively correlated with retention on the board ($r = .33$). The correlation was also significant using shorter or longer time periods (one or three years). We used logistic regression analysis to estimate the effect of director influence on longevity, after accounting for effects of the control variables listed below. The influence measure had a strong effect on longevity in these models ($p < .001$).

We conducted separate analyses of influence at the board level. Although our theoretical perspective focuses primarily on how network ties and experience affect the influence of individual directors, our theory can also be extended to predict the influence of outside directors as a group. When minority outside directors have appropriate network ties and prior experience, the board as a whole should be better able to make meaningful contributions to strategic decision making. Accordingly, in separate analyses, we examined the effects of collective minority director experience and social

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ties, averaged across minority directors, on overall board influence on strategic decision making. Board-level influence was measured with separate survey items that are analogous to questions about the influence of individual directors (e.g., "To what extent does the board influence strategic decision making?"). These questions about board-level influence were answered by the chief executive officer (CEO) and by individual outside directors ($N = 188$ companies).

The additional analyses showed that (1) there was high interrater reliability between CEOs and outside directors regarding the overall level of board influence on decision making ($\kappa = .83$); (2) the hypothesized effects reported below were substantively unchanged using the board-level measures of influence; and (3) the results were substantively unchanged when influence was assessed by the CEO, rather than by the outside director, which reflects the high interrater reliability for this measure. Thus, while the primary analyses reported below are based on individual directors' self-reported influence, the results are robust to influence assessed at the board level by different respondents (i.e., CEOs). The results of these additional analyses provide further evidence that our findings do not reflect systematic biases in the measure of self-reported director influence.

Demographic characteristics. We examined five demographic characteristics: functional background, industry background, education, race, and gender. We make no claim that the attributes employed here represent the full set of possible characteristics that could be examined. Rather, our objective was to test the hypothesized mechanisms using a range of different characteristics that could provide a basis for minority status. Thus, in addition to characteristics that have been used in prior research on boards of directors and top management (e.g., functional background, industry background, and education), and which are thought to indicate underlying differences in expertise and beliefs, we also included characteristics that may not indicate such underlying differences, such as race and gender. While racial or gender differences may not indicate different perspectives on corporate strategy, there is abundant evidence in the larger literatures on relational demography, intergroup relations, and minority influence that they can provide a basis for group categorization. Given public calls for boards to involve members of different races and genders in strategic decision making, it seems particularly important to examine the effects of minority status on these characteristics.

We developed separate measures of minority status for each characteristic because our theoretical perspective, which is rooted in self-categorization theory (Stangor et al., 1992; Tsui, Egan, and O'Reilly, 1992), suggests that minority status is multidimensional, such that directors can have minority status on one dimension and majority status on another; their status on each dimension can independently affect their influence, in the absence of appropriate experience or board ties. Recent reviews of the demography literature have emphasized the importance of examining specific demographic characteristics individually, thus taking a multidimensional

perspective on demographic diversity (Pelled, 1996; Williams and O'Reilly, 1997).

Functional background. A number of empirical studies have established a link between a manager's functional background and his or her perspectives and/or expertise. Dearborn and Simon (1958) found evidence for selective perception in the identification of company problems according to managers' functional area, suggesting that executives with primary experience in a particular functional area tend to have similar viewpoints about the source of poor performance (see also Beyer et al., 1997). Waller, Huber, and Glick (1995) found that top executives were more aware of changes in organizational effectiveness related to their own functional backgrounds. Hitt and Tyler (1991) showed that experience in particular functional areas predicted differences in executives' strategic evaluations of acquisition candidates, indicating that functional background can influence managers' attitudes about important strategic decisions facing the firm.

CEOs and directors sharing a particular functional background are thought to develop common schemata or belief structures relevant to strategic decision making (Dearborn and Simon, 1958; Walsh, 1988), leading them to diagnose strategic issues comparably and prefer similar solutions (Hambrick and Mason, 1984). Studies have documented a relationship between the functional background of top managers and generic firm strategy or corporate diversification strategy (e.g., Smith and White, 1987; Fligstein and Brantley, 1992). Several authors have suggested that functional background can provide a salient basis for out-group categorization (e.g., Useem and Karabel, 1986; Tsui, Egan, and O'Reilly, 1992). Thus, differences in functional background between directors can lead them to perceive each other as out-group members, independent of attitudinal or behavioral differences between them.

Consistent with prior research (e.g., Miles and Snow, 1978; Hambrick and Mason, 1984; Westphal and Zajac, 1995), we consolidated the various functional backgrounds into three core areas: output functions, which include marketing and sales; throughput functions, which include operations, research and development, and engineering; and peripheral functions, comprising law, finance, and accounting. These general categories are thought to capture key differences in functional experience and, thus, differences in managers' strategic perspective and expertise (Hambrick and Mason, 1984; Finkelstein, 1992). Each director's primary functional area was determined as the area in which he or she had the most experience. To measure minority status, a dichotomous variable was created and coded as 1 if less than 50 percent of the board members had the same functional background as the focal director (*minority functional background*). A dichotomous distinction between minority and majority status implies a potentially nonlinear increase in influence from minority to majority status, such that a director with a salient characteristic enjoys a larger increase in influence when that characteristic increases in prevalence from 49 percent of the group to 51 percent than when the prevalence of the characteristic increases from 47 percent to 49 percent of the group.

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Such a nonlinear distribution has been widely hypothesized in the literature on minority influence and has received some empirical support in experimental studies (for a review, see Tanford and Penrod, 1984). This finding is consistent with social impact theory (Latane and Wolf, 1981), which suggests that groups tend to apply social decision schemes that confer disproportionate influence on members of the majority. It should be noted that empirical support for this proposition derives primarily from laboratory studies in which the subjects (college students) typically lack social ties to each other and have relatively little prior experience with small-group decision making in similar contexts.

Industry background. A variety of empirical studies have provided evidence that managers with common experience in the same industry are more likely to have similar beliefs about competitive threats and opportunities that should influence strategic decision making (Spender, 1989: 17). These "industry recipes" become taken for granted among managers in the industry and are highly resistant to change (Huff, 1982; Hambrick, Geletkanycz, and Frederickson, 1993; Geletkanycz and Hambrick, 1997). Ireland et al. (1987) showed that managers from the same industries tended to weight the importance of various performance criteria and environmental characteristics more similarly than managers from different industries, while Sutcliffe and Huber (1998) also found strong evidence that managers with experience in the same industry develop common perceptions of environmental threats. Hitt and Tyler (1991) provided evidence that managers with common industry experience evaluated acquisition candidates according to similar criteria. Thus, directors from outside the industry, who serve as top managers at a firm in a different industry, are likely to have different assumptions about which variables are more or less important in making strategic decisions and about competitive threats and opportunities facing the firm.

Qualitative research also suggests that industry background is a salient basis for categorizing directors, in that directors commonly classify each other as industry insiders or outsiders, and stereotypes are attached to each group (Lorsch, 1989). Industry insiders are sometimes viewed as lacking an awareness of strategic alternatives or having a restricted knowledge base, while industry outsiders are often viewed as lacking in-depth knowledge of the industry environment (Lorsch, 1989; Demb and Neubauer, 1992).

To measure minority status with respect to industry background we created a dichotomous variable, coded as 1 if the focal director did not have prior management experience at another firm in the same industry as the focal firm while more than 50 percent of the other board members did have such experience (*minority industry background*). In effect, this variable assesses whether the focal director is an industry outsider among industry insiders. We classified firms by industry according to their primary two-digit Standard Industrial Classification (SIC) code. We conducted separate analyses in which directors were classified as industry insiders if they had prior management experience in any of the industry segments for which the focal firm reported sales in the year

of the survey, and the results reported below were unchanged.

Educational background. A variety of empirical studies have provided evidence that managers' educational backgrounds indicate differences in their underlying attitudes and expertise. Some studies have linked the level of education with the capacity for information processing and tolerance for ambiguity (Schroder, Driver, and Streufert, 1967; Dollinger, 1984). Other studies have shown a relationship between education level and the rate of corporate innovation, or the likelihood of strategic change (e.g., Bantel and Jackson, 1989; Wiersema and Bantel, 1992). Advanced management education, in particular, may inculcate common beliefs and taken-for-granted assumptions about normative strategic decision making. Hambrick and Mason (1984: 201) suggested that management education both encourages and indicates a preference for "administrative complexity," and Hitt and Tyler (1991) found that the type of graduate degree held by top managers explained variation in how they evaluated acquisition candidates.

There is also evidence that educational affiliation, and especially the prestige of that affiliation, predicts fundamental differences in behavioral and leadership styles (Collins, 1979), which in turn can provide the basis for group categorization. Tsui, Egan, and O'Reilly (1992) suggested that educational background itself can provide a salient basis for psychological group identification, thus contributing to in-group/out-group categorization, independent of underlying differences in attitudes or expertise. There is also evidence that certain aspects of managers' educational background are salient criteria for categorizing candidates for promotion, notably the possession of an advanced management degree (e.g., an MBA) and/or a degree from a prestigious institution (e.g., an Ivy League school) (Useem and Karabel, 1986; Zajac and Westphal, 1996). To the extent that these criteria are salient in management and director selection, they provide a basis for an in-group/out-group categorization of board members. The sociological literature on corporate elites also suggests that an Ivy League education, in particular, remains a salient indicator of upper-class status to senior managers (Baltzell, 1958; Domhoff, 1967; Zweigenhaft and Domhoff, 1998). Domhoff (1967: 16), quoting Baltzell (1958), described Ivy League alumni as an "upper class surrogate family on an almost national scale." A variety of stereotypes, some positive and some negative, are associated with individuals who have such credentials (Domhoff, 1967; D'Aveni, 1990), exacerbating the potential for out-group biases. When most directors lack an Ivy League degree or an MBA, negative stereotypes about these credentials provide the basis for out-group bias toward the minority, and when most directors have them, positive stereotypes can provide the basis for such biases (Hogg and Turner, 1987). As Useem and Karabel (1986) noted, the salience of these characteristics is particularly high among older generations of managers, who were born prior to 1960, which includes most of the individuals in our sample.

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We created two measures to assess minority status with respect to educational background. The first was coded as 1 if the director had an advanced management degree while more than 50 percent of the other board members did not, or vice versa (*minority degree type*). The second measure was coded as 1 if the director had an Ivy League degree while more than 50 percent of the other board members did not, or vice versa (*minority educational affiliation*).

Race and gender. While board members who are in a minority position due to their sex and race may not necessarily differ from other directors in terms of attitudes and values, there is evidence from research on relational demography, intergroup relations, and minority influence that their demographic differences can provide the basis for out-group categorization, creating the potential for intergroup bias (Kramer, 1991; Williams and O'Reilly, 1997). Women in male-dominated groups may receive more negative performance evaluations than men (cf. Swim et al., 1989). Tsui and O'Reilly (1989) found that subordinates whose sex varied from that of their supervisors received less favorable performance evaluations. Minority members who are perceived by others to be less capable may internalize these evaluations and perform less well (cf. Spencer, Steele, and Quinn, 1999; Steele and Aronson, 1995). Alternatively, or in addition, others may purposefully or inadvertently block their participation because they perceive the minority members to be less competent than others. In either case, meaningful involvement is attenuated. Tsui, Egan, and O'Reilly (1992) found individual sex- and race-based diversity to be associated with lower levels of psychological commitment to the group, lower intentions to stay, and higher absence. Thus, minority status due to race or gender has the potential to reduce a director's influence on the board. Although there is relatively little variation on race in the population of corporate directors, self-categorization theory suggests that a characteristic becomes more salient or distinctive to group members as its prevalence in the group decreases (Turner, 1987; Wiersema and Bird, 1993; Mehra, Kilduff, and Brass, 1998). Thus, minority status on race may provide a highly salient basis for out-group categorization. We created dichotomous variables to indicate minority status with respect to race and gender (*minority race*; *minority gender*).

Independent Measures

We measured a focal director's prior experience in a minority role on other boards as:

$$\sum_{c=1}^6 \sum_{b=1}^N Y_{bc}$$

where Y is the number of years the director has had minority status on another board b for characteristic c, and N is the number of boards on which the individual had served as an outside director. In other words, we calculated the total num-

ber of years the director has served on another board in a minority position for a given demographic characteristic, aggregated across all boards the director served on. This procedure yielded six indicators of minority experience on other boards (i.e., one variable for each demographic characteristic). We then added these six variables together into a single, composite indicator of prior experience. Higher values of this measure indicate that a director had more experience as an outside board member on one or more of the six demographic characteristics. We developed a composite measure because the minority influence style that directors learn from experience should generalize across demographic characteristics to some degree. For instance, a director who has prior experience as a functional-background minority is more likely to have acquired social influence skills that would help him or her function as an industry-background minority on the focal board. We also developed an analogous measure of a *focal director's prior experience in a majority role* on other boards. We measured *other majority directors' prior experience in a minority role* using the composite measure described above, averaged across majority directors.

Our measurement approach assumes that minority experience across multiple characteristics at another board has a stronger effect on a director's influence than minority experience on a single characteristic. It might be suggested that directors enjoy fewer learning benefits from minority experience on additional characteristics at the same board. But the literature on self-categorization has shown that the salience of particular demographic differences in a group can vary over time, depending, for example, on which individuals are participating in the discussion at a particular time (Hogg and Turner, 1987; Simon et al., 1997), such that an individual who has minority status on several characteristics would need to use minority influence tactics more frequently to achieve a given level of influence to avoid out-group bias on each of the characteristics. Thus, directors can acquire more experience in minority influence when they have minority status on multiple characteristics at the same board.

We measured *common board memberships* between the focal director and other, majority directors as the number of other boards in the larger sample frame on which the focal director and another, majority director both held an appointment. The number of shared appointments was calculated separately for each of the other, majority directors (i.e., each focal director/majority director dyad) and then averaged across majority directors. As discussed above, a third-party board tie exists between a minority director A and a majority director B when A sits on another board with a third director C, who also sits on a different board with B (Gulati and Westphal, 1999). We counted the number of such ties between the focal director and each of the other, majority directors and then calculated the average across majority directors (*third-party board ties*).

We assessed the hypothesized interaction effects with the product-term approach. To avoid any possible multicollinearity problem, the experience and board-tie variables were centered (Jaccard, Turrisi, and Wan, 1990). One set of interaction

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terms was created by multiplying each minority status variable by each experience variable, and a second set was created by multiplying the minority status variables by the board-tie variables.

Control variables. Hambrick and Mason (1984) argued that demographic differences among top managers should be more beneficial to strategic decision making in relatively turbulent environments (see also Murray, 1989; Glick, Miller, and Huber, 1993). Similarly, the potential value of demographic minority involvement in board decision making could be greater in more unstable environments, where excessive adherence to the conventional wisdom espoused by majority members and a lack of diversity in strategic perspectives could impede adaptation to environmental changes. Thus, we controlled for *environmental instability* in all models. Following Zajac and Westphal (1996), we measured instability according to changes in the industry concentration ratio, calculated as the percentage of an industry's sales, at the four-digit SIC level, accounted for by the four largest firms.

We also controlled for factors that could enhance the general ability of directors to influence board decision making, whether or not they are minority members. Following studies that have used the level of education as an indicator of general expertise and capability (Bantel and Jackson, 1989; Finkelstein, 1992), we controlled for the *director's education level* in all models, using Wiersema and Bantel's (1992) classification. Similarly, because more extensive general management experience could also be associated with a director's potential contribution to board decision making, we controlled for *prior management experience*, operationalized as the number of years during which a director had previously worked on a top management team. We also controlled for the number of *functional areas* in which directors had prior experience, because their ability to contribute to board decision making may be enhanced if they have a broader base of prior experience (Finkelstein, 1992).

Given that board norms are thought to confer higher status on relatively senior directors (Whisler, 1984; Demb and Neubauer, 1992), we controlled for *director tenure* and *age* in the models. In addition, because studies suggest that stock ownership may increase a director's influence over the decision-making process (e.g., Kosnik, 1990; Hoskisson, Johnson, and Moesel, 1994). We controlled for *director stock ownership* in all models, measured as the number of common shares owned by the director divided by total common stock outstanding. While a director's influence may be affected by the total number of appointments held on other boards (D'Aveni, 1990; Finkelstein, 1992), or the total number of years the director has served on other boards, we did not expect these variables to predict influence independent of the director's prior experience as a minority/majority member, and separate analyses confirmed that these variables were not significant in any of the models and did not change the reported results. Similarly, we controlled for other measures of centrality in the board interlock network (e.g., betweenness) that have been shown to enhance power and influence at lower levels of the organization (Brass, 1984; Brass and

Burkhardt, 1992), and again the effects were consistently insignificant. Moreover, the interaction between these variables and minority status was also insignificant in predicting a director's influence. In this case, it seems likely that social embeddedness resulting from common ties and third-party ties to majority directors may be more important in moderating out-group biases than any information or status derived from network centrality.

A director's influence might also be affected by the power of outside directors as a group in their relationship with the CEO. Several authors have suggested that CEOs are more likely to dominate board decision making when a large portion of outside directors were appointed during their tenure (Boeker, 1992; Main, O'Reilly, and Wade, 1995; Sundaramurthy, 1996). Accordingly, we included a control variable indicating the *portion of the board appointed after the CEO*. Because prior studies have also suggested that boards have more power over top managers when the CEO does not hold the position of board chair (e.g., Mallette and Fowler, 1992; Westphal and Zajac, 1995; Baliga, Moyer, and Rao, 1996), we controlled for separation of the CEO and board chair positions (*board leadership structure*), using a dichotomous measure coded as 1 if the CEO and board chair positions were separate, and 0 otherwise. Moreover, directors who serve on the executive committee may exert more influence over strategic decision making than non-committee members (Johnson, Daily, and Ellstrand, 1996). Thus, we controlled for membership on the executive committee in the analysis (*executive committee membership*).

Firm performance could affect the potential value of a minority director's involvement. Poor performance could prompt board members to seek input from minority directors who can provide a novel perspective on strategic issues. Alternatively, the heightened external scrutiny that often accompanies poor performance could lead to greater distrust of out-group members on the board, possibly leading to marginalization of minority directors (Ocasio, 1995). We controlled, thus, for firm performance in all models, measured as *return on equity*. Finally, we controlled for the size of the minority in all models, calculated as the number of minority directors for a given characteristic, divided by the total number of board members (*minority director percentage*).

RESULTS

We used OLS multiple regression analysis to analyze director influence over board decision making. Descriptive statistics and bivariate correlations are displayed in table 1. Results of the multiple regression analyses are shown in table 2. The table includes the main effects model and interaction models for each of the demographic characteristics (i.e., minority status is defined by functional background in the first interaction model, industry background in the second model, etc.). The model shown in the last column assesses effects of minority status across multiple demographic characteristics; this model is discussed further below.

Consistent with hypothesis 1a, the results show a positive and significant interaction between minority status and prior

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Table 1

Descriptive Statistics and Pearson Correlation Coefficients (N = 526)*

| Variable | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--|-------|-------|------|------|------|------|------|------|------|------|------|
| 1. Minority functional background | .39 | .49 | | | | | | | | | |
| 2. Minority industry background | .16 | .37 | -.10 | | | | | | | | |
| 3. Minority educational affiliation | .31 | .46 | -.18 | -.05 | | | | | | | |
| 4. Minority degree type | .26 | .44 | -.07 | -.11 | .02 | | | | | | |
| 5. Minority race | .05 | .21 | -.17 | -.14 | -.09 | -.23 | | | | | |
| 6. Minority gender | .11 | .31 | -.08 | -.06 | -.10 | .01 | -.03 | | | | |
| 7. Focal director experience, minority | 22.16 | 13.36 | .04 | .05 | .04 | .07 | -.06 | -.07 | | | |
| 8. Focal director experience, majority | 78.70 | 51.92 | -.06 | -.03 | -.03 | -.12 | -.20 | -.19 | .12 | | |
| 9. Majority director exper. as minority | 19.37 | 11.25 | .03 | .00 | .01 | .03 | .00 | .02 | .04 | -.01 | |
| 10. Common board memberships | .76 | .87 | .22 | .03 | .08 | .14 | .17 | .11 | -.05 | .01 | -.03 |
| 11. Third-party board ties | 6.02 | 3.60 | .14 | .07 | .06 | .08 | .15 | .10 | -.04 | .01 | -.02 |
| 12. Director stock ownership | .01 | .01 | .07 | .11 | .01 | .06 | .02 | -.01 | .01 | -.01 | .01 |
| 13. Environmental instability | .02 | .04 | -.01 | .02 | .00 | .00 | .00 | .02 | .09 | -.02 | -.03 |
| 14. Director age | 61.99 | 8.19 | .12 | .15 | .01 | .04 | .02 | .03 | .04 | .13 | -.01 |
| 15. Functional areas | 1.31 | 1.10 | .01 | .03 | .02 | .02 | -.03 | -.01 | -.02 | .04 | .03 |
| 16. Prior management experience | 21.35 | 12.96 | .06 | .04 | .01 | .09 | -.01 | .02 | .01 | .06 | .02 |
| 17. Education level | 15.96 | 1.29 | .03 | .05 | .10 | .02 | .04 | .03 | -.01 | .01 | -.01 |
| 18. Portion of board appointed after CEO | .44 | .22 | -.02 | .05 | -.05 | -.01 | .02 | .00 | .00 | -.02 | .00 |
| 19. Board leadership structure | .29 | .46 | .04 | .01 | .01 | -.02 | -.01 | -.03 | -.03 | .00 | .02 |
| 20. Return on equity | .14 | .11 | .01 | .03 | -.01 | -.02 | -.01 | -.01 | .05 | .07 | .08 |
| 21. Tenure | 9.65 | 7.71 | -.02 | -.06 | -.03 | -.03 | -.14 | -.11 | .06 | .06 | .00 |
| 22. Executive committee membership | .40 | .49 | -.03 | -.01 | -.05 | -.06 | -.19 | -.23 | -.08 | .16 | .01 |
| 23. Minority director percentage | .32 | .21 | .04 | .01 | .01 | .02 | .01 | .03 | -.01 | .02 | .01 |
| 24. Log of sales | 7.54 | 1.39 | -.03 | -.02 | -.02 | .01 | .04 | -.01 | .05 | .10 | .20 |
| 25. Multiple characteristics | 1.51 | 1.58 | .10 | .22 | .34 | .37 | .28 | .33 | .12 | -.07 | .02 |
| 26. Influence | .00 | .90 | -.02 | -.09 | .02 | -.03 | -.13 | -.16 | .04 | -.03 | .16 |
| Variable | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 11. Third-party board ties | .06 | | | | | | | | | | |
| 12. Director stock ownership | .01 | -.04 | | | | | | | | | |
| 13. Environmental instability | -.03 | -.01 | .05 | | | | | | | | |
| 14. Director age | -.01 | .04 | .02 | -.01 | | | | | | | |
| 15. Functional areas | -.01 | .07 | .02 | .01 | .05 | | | | | | |
| 16. Prior management experience | .02 | .05 | .03 | .06 | .32 | .12 | | | | | |
| 17. Education level | -.03 | .01 | .06 | .01 | -.02 | .03 | -.07 | | | | |
| 18. Portion of board appointed after CEO | .02 | .04 | -.02 | -.05 | .03 | -.01 | -.09 | .02 | | | |
| 19. Board leadership structure | -.02 | -.01 | .06 | .01 | -.02 | -.01 | -.01 | -.01 | -.24 | | |
| 20. Return on equity | .04 | .03 | .01 | .02 | .01 | .04 | -.01 | .00 | .03 | -.02 | |
| 21. Tenure | .05 | .07 | .05 | -.06 | .03 | .00 | .04 | .02 | .02 | -.03 | .01 |
| 22. Executive committee membership | .09 | .05 | .14 | -.01 | .17 | .03 | .11 | .02 | -.02 | .00 | -.01 |
| 23. Minority director percentage | .04 | .07 | -.02 | -.01 | -.02 | .01 | .01 | .00 | -.05 | .09 | .13 |
| 24. Log of sales | .03 | -.01 | -.03 | .02 | .06 | -.01 | .07 | .01 | .14 | -.08 | .02 |
| 25. Multiple characteristics | .17 | .09 | .10 | .04 | .12 | .11 | .08 | .04 | -.03 | -.01 | .02 |
| 26. Influence | .01 | .03 | .15 | .04 | .01 | .14 | .28 | .05 | .12 | -.09 | .08 |
| Variable | 21 | 22 | 23 | 24 | 25 | | | | | | |
| 22. Executive committee membership | .10 | | | | | | | | | | |
| 23. Minority director percentage | -.03 | .01 | | | | | | | | | |
| 24. Log of sales | .02 | .02 | -.04 | | | | | | | | |
| 25. Multiple characteristics | -.07 | -.05 | .04 | .03 | | | | | | | |
| 26. Influence | .08 | .10 | .06 | -.03 | -.12 | | | | | | |

*All correlations above .08 are statistically significant at $p < .05$.

experience in a minority role for five of the six demographic characteristics: the effect of minority status on influence becomes more positive as a director's experience in a minority role increases. A separate analysis of simple effects showed further that, in general, minority status has a positive and significant effect on influence at relatively high levels of prior minority experience (i.e., one standard deviation above the mean) and a negative effect at relatively low levels (i.e.,

Table 2

Multiple Regression Analysis of Directors' Influence over Board Decision Making (N = 526)*

| Independent variables | Interaction Models | | | | | | | |
|--------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Main Effects | Functional back. | Industry back. | Educ. affiliation | Degree type | Race | Gender | Multiple |
| Minority Status X | | | | | | | | |
| Focal director experience, minority | | .027*** (.007) | .400* (.196) | .023 (.023) | .021** (.008) | .036** (.013) | .026** (.010) | .006** (.002) |
| Focal director experience, majority | | -.016 (.012) | -.146* (.064) | -.018* (.008) | -.007 (.007) | -.117** (.044) | -.038*** (.012) | -.005* (.002) |
| Majority director exper. as minority | | .004* (.002) | .011*** (.004) | .005** (.002) | .004* (.002) | .008* (.004) | .009*** (.003) | .002*** (.0006) |
| Common board memberships | | .302*** (.091) | .417** (.145) | .207* (.101) | .118 (.104) | .724 (.577) | 1.104** (.423) | .074* (.032) |
| Indirect board ties | | .105* (.048) | .039 (.041) | .173** (.072) | .107* (.053) | .466** (.160) | .293** (.113) | .025*** (.008) |
| Minority functional background | -.052 (.097) | -.072 (.103) | -.052 (.098) | -.056 (.098) | -.057 (.099) | -.049 (.098) | -.057 (.098) | |
| Minority industry background | -.225† (.132) | -.233† (.134) | -.294† (.152) | -.263† (.143) | -.231† (.133) | -.259† (.132) | -.261† (.133) | |
| Minority educational affiliation | .038 (.106) | .087 (.113) | .036 (.116) | .032 (.129) | .027 (.117) | .033 (.107) | .045 (.107) | |
| Minority degree type | -.067 (.106) | -.062 (.114) | -.067 (.108) | -.031 (.107) | -.048 (.110) | -.051 (.107) | -.043 (.107) | |
| Minority race | -.317† (.179) | -.303† (.180) | -.292 (.180) | -.303† (.181) | -.288 (.180) | -.361† (.191) | -.309† (.180) | |
| Minority gender | -.203 (.127) | -.191 (.127) | -.203 (.128) | -.194 (.128) | -.203 (.127) | -.197 (.128) | -.188 (.129) | |
| Multiple characteristics | | | | | | | | -.034 (.027) |
| Focal director experience, minority | .005 (.003) | .007 (.004) | .005 (.004) | .004 (.004) | .007 (.004) | .004 (.004) | .004 (.004) | .005 (.004) |
| Focal director experience, majority | -.004 (.004) | -.002 (.004) | -.004 (.004) | -.005 (.004) | -.003 (.004) | -.004 (.004) | -.004 (.004) | -.004 (.004) |
| Majority director exper. as minority | .002* (.001) | .002* (.001) | .002* (.001) | .002* (.001) | .002* (.001) | .001† (.0008) | .0016† (.0009) | .002* (.001) |
| Common board memberships | .022 (.046) | .092† (.051) | .034 (.049) | .059 (.047) | .066 (.050) | .023 (.044) | .022 (.046) | .028 (.046) |
| Third-party board ties | .024 (.032) | .024 (.038) | .026 (.033) | .054 (.033) | .049 (.033) | .027 (.033) | .026 (.033) | .027 (.033) |
| Director stock ownership | 13.155* (5.985) | 13.716* (6.005) | 12.925* (5.996) | 13.123* (6.062) | 12.766* (6.004) | 12.941* (5.924) | 12.979* (5.924) | 12.855* (5.936) |
| Environmental instability | .817 (1.121) | .800 (1.125) | .838 (1.123) | .822 (1.128) | .936 (1.129) | .807 (1.123) | .860 (1.123) | .834 (1.128) |

Table 2 (Continued)

| Independent variables | Interaction Models | | | | | | | |
|--------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Main Effects | Functional back. | Industry back. | Educ. affiliation | Degree type | Race | Gender | Multiple |
| Director age | .001 (.005) | .001 (.005) | .001 (.005) | .001 (.005) | .001 (.005) | .001 (.005) | .001 (.005) | .001 (.005) |
| Functional areas | .073 [•] (.037) | .080 [•] (.037) | .074 [•] (.037) | .077 [•] (.037) | .075 [•] (.037) | .075 [•] (.037) | .076 [•] (.037) | .075 [•] (.037) |
| Prior management experience | .009 ^{••} (.003) | .009 ^{••} (.003) | .010 ^{••} (.003) | .010 ^{••} (.003) | .010 ^{••} (.003) | .010 ^{••} (.003) | .009 ^{••} (.003) | .010 ^{••} (.003) |
| Education level | .043 (.030) | .041 (.030) | .043 (.031) | .043 (.031) | .044 (.031) | .046 (.032) | .047 (.031) | .044 (.031) |
| Portion of board appointed after CEO | .342 [•] (.158) | .323 [•] (.157) | .349 [•] (.158) | .345 [•] (.160) | .341 [•] (.159) | .343 [•] (.158) | .344 [•] (.157) | .344 [•] (.159) |
| Board leadership structure | -.163 [†] (.093) | -.162 [†] (.093) | -.168 [†] (.094) | -.170 [†] (.094) | -.152 (.093) | -.169 [†] (.091) | -.164 [†] (.092) | -.169 [†] (.094) |
| Return on equity | .548 (.365) | .536 (.364) | .535 (.366) | .545 (.366) | .539 (.368) | .540 (.365) | .547 (.365) | .541 (.367) |
| Tenure | .009 [†] (.005) | .008 [†] (.005) | .008 [†] (.005) | .009 [†] (.005) | .008 [†] (.005) | .009 [†] (.005) | .009 [†] (.005) | .008 [†] (.005) |
| Executive committee membership | .132 [†] (.077) | .133 [†] (.077) | .130 [†] (.077) | .128 [†] (.076) | .130 [†] (.076) | .132 [†] (.077) | .134 [†] (.077) | .130 [†] (.077) |
| Minority director percentage | .219 (.146) | .015 (.052) | .076 (.086) | .023 (.057) | .082 (.070) | -.165 (.133) | -.068 (.091) | .187 (.115) |
| Constant | 10.08 ^{•••} (.36) | 17.84 ^{•••} (.58) | 17.39 ^{•••} (.55) | 14.95 ^{•••} (.48) | 13.06 ^{•••} (.45) | 18.13 ^{•••} (.59) | 18.45 ^{•••} (.61) | 18.08 ^{•••} (.59) |

• p ≤ .05; •• p ≤ .01; ••• p ≤ .001; t-tests are one-tailed for hypothesized effects, two-tailed for control variables.

* Standard errors are in parentheses.

† p ≤ .10.

one standard deviation below the mean). The simple effects were positive and significant at $\alpha = .05$ for five of the six characteristics at high levels of experience and negative and significant for four of the characteristics at low levels of experience (a fifth characteristic is significant at $\alpha = .10$).

The results offer some support for hypothesis 1b: the greater the director's experience in a majority role on other boards, the more negative the relationship between minority status and the director's influence over decision making across four of the demographic characteristics. The results are strongly consistent with hypothesis 2. As shown in table 2, the greater the prior experience of majority directors in a minority role, the more positive the effect of minority status on influence. This effect is significant for all six demographic characteristics. Moreover, analysis of simple effects showed that at high levels of such experience (i.e., one standard deviation above the mean), minority status was positively and significantly related to influence for five of the six characteristics at $\alpha = .05$.

The results in table 2 also generally support hypothesis 3a. For four of the demographic characteristics, the effect of minority status on director influence becomes more positive as the number of common board memberships with other, majority directors increases. Moreover, there is consistent evidence for hypothesis 3b: for five of the six characteristics, the effect of minority status on director influence also becomes more positive as the number of indirect, third-party ties to majority directors increases. And, again, analysis of simple effects generally showed that at high levels of either kind of board tie (i.e., one standard deviation above the mean), minority status had a positive effect on a director's influence. For common board ties, the effects of minority status were positive and significant at $\alpha = .05$ across four of the six characteristics at high levels of common ties (a fifth characteristic is significant at $\alpha = .10$) and negative and significant for four of the characteristics at low levels of common ties. For indirect ties, the effects of minority status were positive and significant at high levels of such ties and negative and significant at low levels of such ties for five of the six characteristics at $\alpha = .05$.

While the primary analyses assess the effects of minority status separately for each demographic characteristic, we also examined the effects of minority status across multiple categories. To the extent that the potential for out-group bias is greater when directors have minority status across multiple characteristics (Stangor et al., 1992), the effects of minority experience and network ties on a director's influence should be stronger in such cases. Thus, we examined the interaction between minority status on multiple categories, calculated as the number of demographic categories in which the director had minority status (from one to six categories), and the independent variables on a director's influence. The results, shown in the last column of table 2, indicate that the hypothesized effects of minority experience, common board memberships, and indirect ties are stronger to the extent that directors have minority status across multiple categories.

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As discussed in the method section, we also conducted separate analyses of director influence at the board level, and the results were consistent with the results of analyses of individual director influence reported here. These analyses showed, for instance, that minority director experience in a minority role (averaged across minority directors on a given board) is positively associated with overall board influence in strategic decision making. Moreover, as noted above, these results were unchanged when influence was assessed by different survey respondents (i.e., CEOs rather than outside directors).

DISCUSSION

Overall, the results provide consistent support for our theoretical framework. Prior research in the upper-echelons and corporate governance literatures has generally assumed that social barriers will arise between group members with different demographic profiles (i.e., resulting from in-group/out-group categorization and/or attraction between similar individuals) and that these barriers will limit the influence of demographic minorities over group decision making. The findings of this study suggest how such barriers can be avoided. In general, the results support our overarching proposition that obstacles to minority influence in strategic decision making can be avoided by prior experiences or social network ties that enable minority directors to create the perception of similarity to the majority. Moreover, the findings provided consistent evidence that minority directors actually enjoyed significantly more influence over decision making than majority directors if they (or majority directors) had relatively high levels of minority versus majority experience on other boards or if they had relatively strong social connections with majority directors through common board memberships and/or third-party board ties. The results also suggest that, in the absence of minority role experience or social ties to the majority, minority directors are less influential than majority directors.

This pattern of results may suggest that minority directors have the potential to make uniquely valuable contributions to board decision making by providing unique perspectives on strategic issues that challenge the conventional wisdom among majority directors and by prompting divergent thinking among majority directors and that this potential may be unleashed by appropriate prior experience or social capital. For instance, the literature on organizational demography and top management teams has suggested that a group member with a marketing background should be particularly valuable to a team composed primarily of individuals with finance backgrounds, because the marketing executive can raise strategic issues that finance executives are less likely to consider, and the minority director has market analysis skills and other expertise that majority executives do not have. At the same time, this literature also suggests that in-group/out-group biases and social conflict between majority and minority executives should lead the finance executives to devalue or dismiss the insights and analysis of the marketing executive, so that the latter is marginalized in the team, despite his or her potential to make unique contributions or to stimulate

divergent thinking. Our findings suggest, however, that if the marketing executive has relatively high social capital through common board appointments with majority directors or via third-party ties or relatively extensive prior experience in a minority role on other boards, then he or she will exert more influence over decision making than other, majority directors. It appears that minority directors are marginalized in decision making only when they lack appropriate prior experience or social capital. This pattern of results generally held for six different demographic attributes, suggesting that our findings are not limited to particular characteristics. Moreover, the effects of prior experience and social capital were stronger when directors had minority status across multiple categories. It appears that minority experience and social ties are particularly valuable in such cases because the potential for out-group bias, and the potential to make unique contributions, is particularly high.

Thus, while researchers in the upper-echelons and corporate governance literatures have tended to assume that demographic differences create social barriers between group members and have resigned themselves to identifying the circumstances in which these barriers are least damaging to strategic decision making (e.g., Murray, 1989; for a review, see Finkelstein and Hambrick, 1996), there may be value in refocusing this debate to consider how social barriers between demographic groups can be minimized or avoided, thus unleashing the potential beneficial effects of diversity on organizational outcomes. The present study suggests the need to distinguish between demographic differences and perceived similarity in addressing this question, as out-group biases that would otherwise result from demographic differences can be avoided when individuals have prior experiences or network ties that enhance perceived similarity between minority and majority directors.

The results also appear to have implications for the larger literature on organizational demography and intergroup relations. Existing perspectives on intergroup relations have generally not considered how in-group/out-group categorization processes might be affected by the prior experience of individuals in other groups. Research on minority influence would suggest that individuals can lower social barriers between themselves and majority members by adopting an appropriate influence style, presenting opinions in a way that highlights common goals or other bases of perceived similarity with the majority (Moscovici, 1985; Ragins, 1997; Erb et al., 1998). The present results add to this literature by suggesting that individuals may be able to learn the appropriate influence style associated with minority status through their experience in this role over time.

The results further suggest that the prior experience of other, majority directors in a minority role on other boards can enhance the influence of minority directors. This finding appears to support our argument that when majority directors have such experience, social barriers resulting from out-group categorization of minority group members are avoided, because majority members are more likely to empathize with minorities. In effect, majority directors may come to identify

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with the minority role through experience on other boards, such that they perceive themselves as similar to minorities on the focal board. Separate analyses suggested that the effects of prior experience generalize across demographic characteristics: when prior experience is measured only for one characteristic, the effects on minority influence are consistently weaker than when the experience measure covers all six characteristics. This is consistent with our perspective that the general role of minority group member may provide a meaningful basis for self-categorization and social identity and that individuals may come to identify with this role through experience. Thus, common experience as a minority group member on different boards can provide a basis for in-group categorization between individuals that transcends the effect of simple demographic differences between them. Our theory and findings suggest that future research should conceptualize minority influence as a generalizable, learned role that may enable individuals to avoid discrimination resulting from minority status on a variety of demographic characteristics.

Our findings may also contribute to research on organizational demography and social networks by showing how the effects of demographic differences are conditioned by the larger social structural context in which group members are embedded. The results showed that minority directors were particularly influential when they had relatively extensive common memberships with majority directors on other boards or many third-party ties to such directors. Thus, studies of management and board demography that do not consider how the broader social structural context can link managers and directors together, directly or indirectly, may overestimate the extent to which social barriers exist between members of different demographic groups. Conversely, the results also suggest that social network ties may have stronger effects on social influence for demographically heterogeneous groups. This would imply that as boards have become more diverse in recent years, the importance of board interlock ties to the social cohesion of corporate elites and the effects of such ties on decision-making processes may have increased in tandem. Accordingly, while prior research on management demography has generally developed in isolation from research on social networks, the findings of this study show the potential benefits that can be derived from combining the insights of both paradigms.

Our theory suggests that common board ties between minority and majority directors may increase minority influence by providing a stronger basis for common social identification, reducing the likelihood of out-group bias toward minority directors. It might also be suggested that when common board ties involve a reversal of minority/majority status, e.g., director A is a minority member at the focal firm and a majority director at another firm X, and another director B is a majority member at the focal firm and a minority director at firm X, a social exchange relationship may develop in which B yields influence to A at the focal firm in order to have influence with A at firm X (cf. Uehara, 1990). In such cases, minority influence could result from social interdependence

with majority members rather than mutual identification. To test this possibility, in separate analyses, we calculated common board ties excluding such cases of minority/majority status reversal, and the hypothesized results were consistently unchanged. This appears to suggest that the effects of common board ties on minority influence do not result from social interdependence between minority and majority directors.

Our theoretical perspective is predicated on a social psychological conception of minority status, in which minority or majority status is determined by the prevalence of a particular social feature in the immediate social context (Moscovici and Faucheux, 1972; Nemeth, 1980; Mackie, 1987). This perspective does not allow us to hypothesize about whether members of generally disadvantaged social groups, such as women and certain ethnic minorities, face greater barriers to exercising influence than other minorities when minority status in the immediate social context is held constant (Smith, 1987). At the same time, our results suggest that prior minority experience and network ties to majority directors are no less effective in increasing the influence of gender minorities or ethnic minorities than in affecting the influence of minorities that are not necessarily disadvantaged in the larger society. By examining minority status based on single demographic characteristics, we considered the extent to which minority experience and social capital assist minority directors in avoiding barriers associated with in- and out-group distinctions based on specific characteristics. In so doing, we have responded to calls for finer-grained demographic analyses (e.g., Tsui, Egan, and O'Reilly, 1992) while also assessing the generalizability of our results.

Although minority directors may face lower potential barriers to exerting influence in the absence of a clear majority, which can occur for dimensions such as functional background that have multiple salient categories, only 8 percent of the boards in our sample lacked a majority functional background, and the results were substantively unchanged when we controlled for the existence of a majority background on the board. Investigating how minority directors exert influence in the absence of a clear majority may offer an interesting direction for future research. Our theory may still explain director influence in such cases, as minority influence might involve increasing the salience of commonalities with each of the other board subgroups and decreasing the salience of demographic differences through independent social interactions or network ties with other directors on the board.

A limitation of this study is that our data did not permit us to directly assess specific director influence tactics. Future research is needed that directly measures communication between directors to assess the specific form of minority influence tactics and to determine under which circumstances they are most needed. Such research may require content analysis of communication in board meetings, perhaps based on written minutes or audiotape recordings. Such an approach would also avoid self-report biases, which can reduce the validity of survey measures of board behavior. Although we conducted separate analyses to validate our sur-

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vey measure of director influence, self-report biases could still be present in the data. Future studies could also extend our findings by examining change in minority influence tactics over time or the dynamic process by which individuals learn how to use specific tactics.

The findings have several implications for research and practice on director selection and board processes. Institutional investors and the popular press have routinely called for the appointment of directors who lack social ties with existing board members, while also strongly advocating greater board diversity with respect to functional background, industry experience, gender, and race (Browder, 1995; *Business Week*, 1997; *Wall Street Journal*, 1996). Results of the present study suggest that this combination of reforms may not automatically enhance board effectiveness. Our results also cast doubt on the widespread assumption among directors and consultants that board members necessarily benefit from their prior experience on other boards (i.e., combined experience as a majority and minority director did not significantly predict influence). At the same time, our results should not be interpreted as suggesting that boards should only appoint demographic minorities who have board ties to majority directors or extensive prior experience in a minority role. Instead, when minority directors lack such experience or social capital, managers need to recognize the potential for social barriers to arise in the decision-making process and to avoid such barriers by playing a more active role in facilitating minority influence.

Future research could extend the theoretical framework developed in this study to examine the influence of demographic minorities in other contexts. The effects of demographic diversity in top management teams, new product development teams, and a variety of other groups may depend critically on the prior experience of group members in similar roles, as well as on the density of direct and indirect social ties that link group members to one another. If organizations are to benefit from the differing viewpoints and experience of demographically diverse members, we need to have a better understanding of how minority influence is affected by the larger social structural and historical contexts in which individuals are embedded.

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