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A NETWORK UTILIZATION PERSPECTIVE ON THE LEADERSHIP ADVANCEMENT OF MINORITIES

ABSTRACT

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Social network researchers have shown that, compared to majority employees, structural constraints can cause minority employees to end up in network positions that limit their access to resources (i.e., social capital), and consequently limit their access to professional opportunities. These findings, however, do not explain why structurally equivalent minority and majority employees achieve differential returns of social capital on their leadership advancement. We propose that majority and minority employees differ in terms of *network utilization*, which is the extent to which individuals utilize their existing network ties. We theorize why and how network utilization processes—career and work utilization of network ties—can explain employees' (i.e., actors) influence on their leadership advancement. We also explicate the process through which actors' direct and indirect network connections (i.e., alters) contribute to such outcomes through both career-supporting utilization and work-supporting utilization with actors. We conclude by outlining the boundary conditions of network utilization theory, a theory that changes the current understanding of how existing social network ties can perpetuate the underrepresentation of minorities in leadership positions.

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Keywords: social categorization; careers; social networks; actor-network theory.

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3 Social network theorists have argued that members of minority groups face greater
4 structural constraints that limit their leadership advancement (i.e., promotion to positions of
5 leadership, Ibarra, 1993; Ng, Eby, Sorensen, & Feldman, 2005) than members of majority
6 groups. Minorities tend to occupy network positions lower in social capital, such that the
7 quantity and quality of resources available in their networks—based on their structural
8 positions within their respective networks (Kilduff & Tsai, 2003)—is lower than that of their
9 majority counterparts (Mehra, Kilduff, & Brass, 1998; Konrad, Seidel, Lo, Bhardwaj, &
10 Qureshi, 2017). As a result, minority employees typically have less access to network
11 connections that could otherwise facilitate their leadership advancement. These insights,
12 however, do not explain why career disparities between minorities and majorities persist even
13 after controlling for differences in social capital (e.g., James, 2000; Metz & Tharenou, 2001;
14 Sagas & Cunningham, 2006). Little is known about how social network processes beyond
15 social network structure affect individual outcomes such as leadership advancement (cf.
16 Ibarra, Kilduff, & Tsai, 2005; Kilduff & Brass, 2010; van den Brink & Benschop, 2014). In
17 particular, it is unclear why a minority employee with the same amount of social capital as a
18 majority employee would not reap the same benefits from an advantageous network position.
19 In this article we examine why and how structurally equivalent majority and minority
20 employees experience significant disparities in leadership advancement.

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22 To illustrate the central issue we aim to address, consider the following example:
23 Alan, a White man who is an associate at a consulting firm, has expertise relevant to the
24 strategic goals of the firm and receives excellent performance reviews. In addition, he
25 maintains good relationships with his colleagues within and outside his department, among
26 whom are several influential managers in strategic positions. When the opportunity to lead a
27 new department arises, Alan, who is a good fit for the position, finds that his social network
28 is a great resource in helping him attain this promotion. He seeks support from his social
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3 network and consequently becomes the top pick for the leadership position. Now, instead of
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5 Alan, consider Aisha, a Black woman who is also an associate at a consulting firm. In terms
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7 of expertise, performance and social network, Alan and Aisha are equal. The only difference
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9 is the social group to which they belong. Would Aisha seek support from the same social
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11 network as Alan? And if she did, would her efforts be as fruitful?

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14 Situating our research at the intersection of social network theory, social
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16 categorization theory, and leadership categorization theory, we explore how stereotypical
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18 perceptions of leadership influence individuals' propensity to capitalize on their network ties
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20 to help themselves, or others, attain promotions to leadership positions. We posit that,
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22 whereas social capital can create access to potentially useful information and resources,
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24 *having access to* information and resources does not necessarily imply that an individual *will*
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26 *actually use* the available information and resources (Gulati & Srivastava, 2014; Seibert,
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28 Kramer, & Liden, 2001). Thus, rather than investigate the formation of network ties, we
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30 focus on the utilization of such ties—*network utilization*—which we define as the way in
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32 which individuals use existing ties in their network to fulfill a specific purpose.
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35 Our research generates three important theoretical contributions. First, we highlight
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37 how network position alone is insufficient to predict the leadership advancement outcomes of
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39 minorities by integrating the current understanding of stereotypical preferences, which
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41 include expectations of what a leader looks like in terms of gender (i.e., that a leader is male;
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43 Schein, 1973, 1975; Lanaj & Hollenbeck, 2015; Koenig, Eagly, Mitchell, & Ristikari, 2011)
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45 and race (i.e., that a leader is White; e.g., Hernandez, Avery, Tonidandel, Hebl, Smith, &
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47 McKay, 2016; Ospina & Foldy, 2009; Rosette, Leonardelli, & Philips, 2008). Second, our
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49 theory explains why and how existing network connections are utilized to affect minorities'
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51 leadership advancement—from the perspective of the individual aspiring to advance as a
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53 leader (i.e., the actor), and his or her social network connections (i.e., the alters). In particular,
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3 we propose that network utilization can serve career opportunity-related (i.e., career
4 utilization), or work task-related (i.e., work utilization) aims, with the former being more
5 strongly related to leadership advancement than the latter. Third, we examine how alters'
6 network utilization with actors can also influence actors' leadership advancement. More
7 specifically, alters can influence actors' leadership advancement depending on the alter's
8 perception of the appropriateness of the actor's leadership advancement (i.e., career-
9 supporting utilization) and the degree to which the alter expects the actor to make substantive
10 work contributions (i.e., work-supporting utilization). In so doing, we not only provide new
11 insights into the perennial problem organizations face regarding the lack of minorities in
12 leadership positions, but also explicate the role alters have in influencing the success of
13 minority leadership advancement. Finally, from a practical perspective, our research informs
14 the organizational strategies that managers can employ to combat stereotype-based biases in
15 leadership advancement outcomes.

30 THEORETICAL FOUNDATIONS

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32 Our theory of network utilization draws on three theoretical perspectives: social
33 network theory, social categorization theory, and leadership categorization theory. These
34 areas are the orienting points that inform our research questions and guide our theory
35 development. We detail each in turn.

36 **Social Network Theory**

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38 A study of how individuals utilize their existing network ties begins with an
39 understanding of social networks. Social network theory describes how entities—here,
40 individuals—are embedded in a larger structure of relationships. The position that an
41 individual occupies in this structure subsequently affects important individual-level
42 outcomes, such as performance (Mehra, Kilduff, & Brass, 2001; Fang, Landis, Zhang,
43 Anderson, Shaw, & Kilduff, 2015), influence (Sparrowe & Liden, 2005; Bowler,

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3 Halbesleben, Stodnick, Seevers, & Little, 2009), and promotions (Brass, 1984; Burt, 1992;
4 Adler & Kwon, 2002; Seibert, Kramer, & Liden, 2001; Feldman & Ng, 2007). The most
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6 beneficial strategic positions are those that are central in the social network, have diverse and
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8 influential social network connections, and bridge disconnected clusters of individuals—i.e.,
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10 have high levels of social capital (Kilduff & Tsai, 2003). These ties to diverse and influential
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12 individuals provide access to resources that contribute to individual-level outcomes, for
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14 instance, by offering unique information or providing support.
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18 Social network theorists have adopted a structural determinism perspective in which
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20 actors in advantageous network positions presumably possess the skills, abilities, and
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22 motivations to make optimal use of the resources in their network. In contrast,
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24 disadvantageously positioned actors are assumed to lack the skills, abilities, and motivation to
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26 overcome structural constraints (Kilduff & Brass, 2010). This deterministic perspective has
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28 been criticized for failing to acknowledge agency (i.e., individuals' autonomous actions), a
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30 criticism which highlights the need for the field of social networks to develop rich
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32 psychological theory at the intersection of agency and structure (e.g., Ibarra, Kilduff, & Tsai,
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34 2005; Kilduff & Brass, 2010; van den Brink & Benschop, 2014).
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38 Although psychological dynamics have not been entirely absent from social networks
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40 research, they are often described as structural processes that determine the formation of
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42 networks. For instance, homophily—based on Byrne's (1971) similarity/attraction
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44 paradigm—explicates the process by which individuals who are more similar are more likely
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46 to form connections (McPherson, Smith-Lovin, & Cook, 2001). Because organizational
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48 networks, and especially networks of power and influence, are dominated by individuals
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50 belonging to the social category of White men, homophily-based processes explain why it is
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52 more difficult for members of other social categories to attain influential network positions
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54 with high levels of social capital (Ibarra, 1993; Mehra et al., 1998; Konrad et al., 2017).
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3 Whereas this explanation is compelling in terms of explaining the development of social
4 networks, it remains silent about potential differences in individuals' utilization of their
5 existing networks (cf. Burt, 1992; cf. Kilduff & Brass, 2010).
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9 The first step of introducing an agency perspective to social networks theory is to
10 understand how individuals decide to realize potential opportunities in their network. A
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12 purely determinist perspective would equate structural position to an individual's skills,
13 abilities, and motivation to optimally use the resources available in the network. Such a
14 perspective would imply—incorrectly—that minorities, who are more likely to reside in
15 peripheries of social networks (as compared to majorities), lack the skills, abilities, and
16 motivation to optimally use the resources in their network (cf. Kilduff & Brass, 2010).
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18 Therefore, it is important to separate the decision to engage in network utilization based on
19 opportunity (i.e., structure) from agency. In effect, “entrepreneurial opportunity and
20 motivation” (Burt, 1992, p. 35) have been thought to derive solely from structural position. In
21 contrast to this view, we theorize that processes resulting from the social category to which
22 individuals belong can account for differences in actors' utilization of network resources.
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26 This is not to deny differences in network positions between minority and majority
27 members. We know majority members tend to have more advantageous network positions
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29 than minority members, and we know homophily accounts for such structural differences.
30 Rather, the point that needs to be addressed is that even when minorities and majorities
31 occupy structurally equivalent positions, when it comes to leadership advancement,
32 majorities benefit more from their position than minorities. Thus, the starting point of our
33 analysis is a situation of structural equivalence (Burt, 1987)—minorities and majorities
34 occupying similar network positions—not because this is typically the case (because it is
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36 not), but because this allows us to address the problem at hand: the disparity between
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38 minorities and majorities in leadership advancement, even when occupying structurally
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3 equivalent network positions.
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5 Importantly, we assume that the network is dominated by the majority—both in the
6 sense that most individuals in the network are majority members, and in the sense that the
7 majority is overrepresented in higher hierarchical positions (US Census, 2016). This
8 assumption is consistent with the original, numerical definition of minority and majority
9 (Blau, 1977). With this assumption in place, we focus on the mechanisms through which
10 disparities in leadership advancement arise over and above the social network’s structural
11 features and constraints. We reason that individuals’ decisions to utilize their network ties can
12 be influenced by socially constructed perceptions (cf. Gilovich, Griffin, & Kahneman, 2002).
13 To explain how individual agency is subject to these socially constructed perceptions in
14 network utilization for leadership advancement, we draw from social categorization and
15 leadership categorization theories.
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29 **Social Categorization Theory**

30 Social categorization is a fundamental human perceptual process that helps
31 individuals reduce and summarize information by grouping people based on similarities and
32 differences (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; cf. Rosch, 1978). Members of
33 a given category share similarities that differentiate them from members of other categories.
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38 Categorizations are highly informational and readily activated (i.e., salient) when they
39 capture similarities and differences between people (e.g., when the focus is on physiological
40 differences, a gender categorization may be informative). By implication, the more a
41 categorization captures similarities and differences between people, the more likely it is to be
42 salient.
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49 Social categorizations give rise to stereotypes, which are generalized beliefs about
50 specific characteristics that are associated with a social group (Judd & Park, 1993). These
51 stereotypes are readily, often subconsciously, used by individuals and broadly applied to all
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3 members of a particular social category. Different minority social groups are associated with
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5 different stereotypes, which can vary in terms of content, for instance, with regard to social
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7 status (Berger, Rosenholtz, & Zelditch, 1980; Johnson, Freeman, & Pauker, 2012),
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9 competence (Fiske, Cuddy, Glick, & Xu, 2002; Sanchez-Hucles & Davis, 2010), and agency
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11 (Bem, 1981; Carton & Rosette, 2011). A Black woman might be at a disadvantage relative to
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13 a Black man in terms of social status (Rosette & Livingston, 2012) because of the communal,
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15 submissive stereotypes associated with women in addition to the stereotype of incompetence
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17 associated with being Black (Carton & Rosette, 2011)—unless she is agentic (Livingston,
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19 Rosette, & Washington, 2012). Indeed, stereotypes associated with a minority member's
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21 social category are multifaceted and can intersect in distinct ways to influence perceptions
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23 (Kang & Bodenhausen, 2015).
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27 Since the impetus for our analysis lies in the leadership advancement challenges
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29 experienced by gender and racial minorities in the workplace, we examine minority
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31 categories associated with stereotypes of lower competence as compared to White men. This
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33 approach is consistent with our earlier discussion of social network theory. Assuming the
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35 network is dominated by the majority (i.e., White men)—both numerically and in terms of
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37 their overrepresentation in higher hierarchical positions—we focus on how minority
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39 categories give rise to stereotypes about competence, which can reinforce their lower position
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41 compared to the majority.
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44 Next, we describe how social categorization processes influence the perception of fit
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46 between an actor's characteristics and a leadership position (cf. Peters, Ryan, Haslam, &
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48 Fernandes, 2012). We explain why stereotypes that are associated with the White male
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50 category have greater overlap with implicit theories about what good leadership entails than
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52 stereotypes associated with minority groups.
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55 **Leadership Categorization Theory**

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3 Individuals often—consciously or subconsciously—distinguish leaders from
4 nonleaders using their implicit leadership theories, or cognitive representations of leader
5 categories. These leader categories are shaped by individuals' past interactions and personal
6 experiences (Fiske & Taylor, 1984; Reskin & Ross, 1995; Foti, Knee, & Backert, 2008).
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10 Based on these implicit leadership theories, a pattern matching process (Lord, Foti, &
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12 Phillips, 1982) is employed to compare an individual's characteristics to those of a prototype
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14 (i.e., cognitive representation) of the relevant leader category to determine whether that
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16 individual matches the profile of a leader. In addition, individuals engage in a pattern
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18 completion process once they perceive an initial match between an individual and the leader
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20 prototype (Shondrick, Dinh, & Lord, 2010), such that prototypical traits and behaviors are
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22 associated with the categorized individual—whether or not they have exhibited these
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27 prototypical traits and behaviors.

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29 Because leader prototypes are based on individuals' past experiences with leaders,
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31 some variation in the content of these leader categories has been found (e.g., depending on an
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33 individual's culture [Gerstner & Day, 1994] and gender [Schein, 2001; Vial, Brescoll,
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35 Napier, Dovidio, & Tyler, 2018]). Generally, however, there is a great deal of overlap in
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37 individuals' cognitive leader representations (Epitropaki & Martin, 2004; Lord et al., 1984;
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39 Shondrick et al., 2010). A key finding from the perspective of the current analysis is that
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41 demographic characteristics are associated with the leader prototype, such that leader
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43 prototypes are typically male (Schein, 1973, 1975; Koenig et al., 2011) and White (Rosette et
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45 al., 2008).

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47 Such implicit leadership theories (Eden & Leviatan, 1975) perpetuate biased
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49 preferences for leaders based on gender and race. Factual attributes (i.e., men are
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51 overrepresented in leadership positions, Zweigenhaft, 2014; US Census, 2016) are
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55 instrumental in developing gendered perceptions of leadership, and such perceptions of
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3 leadership are instrumental in perpetuating the disproportionate number of men in leadership
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5 positions (Eagly & Carli, 2007a; 2007b). This mechanism can similarly shape racial
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7 perceptions of leadership (Chung-Herrera & Lankau, 2005; Liu & Baker, 2016; Nkomo,
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9 1992; Rosette & Livingston, 2012), fusing the leadership category with the White male
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11 category (cf. Heilman, 1983, 2001).

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14 As a result, White men are more readily perceived as leaders and are more likely to be
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16 expected to succeed in leadership positions (Burgess & Borgida, 1999; Eagly & Karau, 2002;
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18 Lyness & Heilman, 2006; Rosette et al., 2008). The perceived fit between their social
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20 category and the leader category enhances their advancement to positions of leadership (cf.
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22 Burgess & Borgida, 1999; Lyness & Heilman, 2006; Rudman & Phelan, 2010). The pattern
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24 completion process that individuals engage in after perceiving initial fit reinforces
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26 perceptions of fit and increases confidence in a leader's success. Conversely, perceived
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28 incongruence between an individual's demographic characteristics and the characteristics that
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30 are associated with the leader prototype can prompt perceptions of misfit between the
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32 individual's social category and leadership potential, and reduce confidence in his or her
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34 ability to succeed as a leader. As such, implicit associations about leadership are incongruent
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36 with social category-based perceptions of minority groups.
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40 To understand how network utilization can affect the underrepresentation of
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42 minorities in leadership positions, it is important to distinguish it from related constructs and
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44 processes. Having laid this theoretical groundwork, we discuss the conceptual distinctiveness
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46 of network utilization before developing our conceptual model of how network utilization
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48 differentially affects the leadership advancement of majority and minority groups.

49 50 **CONCEPTUAL DISTINCTIVENESS**

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53 Network utilization is theoretically and conceptually distinct from network creation
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55 and types of network ties. Unlike network creation (i.e., the formation of new network ties),
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3 network utilization captures the way in which individuals make use of the available
4 information and resources in their social networks. That is, rather than focusing on the
5 constraints minorities face in attaining high levels of social capital through the creation of
6 network ties (cf. Ibarra, 1993; Mehra et al., 1998), we focus on the utilization of their existing
7 ties. Network utilization can be enacted by an actor (i.e., an individual utilizing their social
8 ties. Network utilization can be enacted by an actor (i.e., an individual utilizing their social
9 ties. Network utilization can be enacted by an actor (i.e., an individual utilizing their social
10 network connections [ties] to achieve a certain outcome), as well as by alters (i.e., alters
11 utilizing their connection [tie] to an actor to achieve a certain outcome). Existing network
12 connections can offer leadership advancement opportunities to individuals within the
13 network. However, the extent to and ways in which actors and alters capitalize on these
14 opportunities can differ in meaningful ways.

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24 Moreover, instead of focusing on the type of network ties utilized within a network,
25 we focus on why individuals draw from their social ties. Indeed, although social network
26 researchers have identified conceptually distinct ties (e.g., information exchange, advice
27 seeking and giving, and friendship, Borgatti et al., 2009), in practice, these ties are highly
28 correlated (Borgatti & Foster, 2003) and provide functionally equivalent potential value to an
29 actor's leadership advancement. Any organizational network connection—be it a colleague,
30 friend, or superior—is a potential resource to an actor's leadership advancement. Myriad ties
31 can provide insight into job openings, offer advice on how to overcome potential hurdles,
32 provide expertise to improve task outcomes, or serve as a link to a colleague with valuable
33 information or to an important skip-level manager.

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46 Network utilization describes the interactive process between individual agency and
47 the network. Scholars have empirically demonstrated that individuals differ in the extent to
48 which they can benefit from opportune structures around them, in part, based on their
49 individual characteristics (e.g., Baer, 2010; Zhou, Shin, Brass, Choi, & Zhang, 2009). For
50 instance, Baer (2010) found that individuals who are more open to experience benefit more
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3 from an advantageous network position in terms of individual creative output. In formulating
4 a conceptual model of network utilization, we elaborate on why existing ties are used for
5 different purposes by actors based on gender and racial characteristics, and how alters'
6 career- and work-supporting activities can produce opportunities for actors to assume
7 positions of leadership.
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12 13 14 **CONCEPTUAL MODEL** 15

16 Actors and alters will consider the possible payoffs of utilizing their existing network
17 ties for different purposes based on social categorization processes, as well as the potential
18 risks of backlash from these different forms of utilization. Indeed, "people are likely to weigh
19 their preferences according to [...] perceptions [of job opportunities] to not waste time
20 pursuing 'poor bets'" (Gottfredson, 1981: 570). In other words, individuals will balance
21 trying to achieve their desires with their sense of what is attainable. Thus, social
22 categorization based on perceived fit with stereotypical expectations can determine both
23 actors' utilization of network ties and alters' network utilization with an actor.
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32 Scholars have asserted that individuals who aspire toward leadership advancement
33 should be well positioned within the organizational network to identify and receive career
34 opportunities, as well as demonstrate strong performance (Burt, 1992; Ng et al., 2006).
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38 Therefore, we begin by distinguishing two specific purposes—career and work utilization of
39 network ties—that describe actors' reasons for utilizing their network. Notably, these
40 purposes are not mutually exclusive; a tie can be perceived as valuable for both career and
41 work purposes. We then broaden our focus from the actor's perspective to alters' role in
42 network utilization processes. As shown in Figure 1, each alter in an actor's network can
43 provide unique contributions to an actor's leadership advancement through career-supporting
44 utilization by leveraging relationships in the form of referrals (e.g., Podolny & Baron, 1997;
45 Seibert et al., 2001) or through work-supporting utilization by drawing on the actor's
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3 perceived task-based competence (e.g., Sparrowe, Liden, Wayne, & Kraimer, 2001).

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5 --- Insert Figure 1 about here ---

6 7 **Network Utilization**

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9 **Career Utilization.** We define *career utilization of network ties* as the actions an
10 actor takes to engage his or her network ties with the purpose of improving his or her career
11 opportunities. Examples of career utilization include informing an alter of the actor's
12 promotion aspirations, asking alters to keep an eye out for career opportunities that might be
13 suitable for the actor, requesting career advice, references or introductions from alters, and
14 maintaining relationships with alters that could help the actor's career. An alter who is aware
15 of an actor's career ambitions is more likely to share information about career opportunities
16 with that actor, to endorse the actor for various career opportunities, or even to offer the actor
17 a promotion, assuming there is no competition between the actor and the alter. If actors do
18 not discuss their career ambitions with alters, career opportunities might reach them later, too
19 late, or not at all.

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33 The exchange of information between actors and alters not only serves to signal
34 actors' leadership advancement wishes, but also prompts alters to interpret the actors'
35 behaviors as intentions to increase their chances at future job opportunities. Within this
36 ongoing exchange, actors engage in career utilization of network ties so that they can receive
37 and act upon alters' information. In so doing, they also communicate the expectation of
38 returning the favor to alters once in positions of leadership (cf. the norm of reciprocity in
39 social interaction; Gouldner, 1960), creating a self-perpetuating cycle of career ascension.
40 Actors' career utilization of the network is thus directly and positively related to their
41 leadership advancement.

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53 We propose that majority and minority actors differ in their perceptions of the
54 usefulness, legitimacy, and expected success of career utilization. Actors assess the

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3 usefulness of their network for career purposes by evaluating which alters in their social
4 network have the influence to improve their leadership advancement outcomes. This
5 assessment is based on social network structure (i.e., identifying the influential individuals
6 within their network), and social categorization processes (i.e., congruence between an alter's
7 social category and the actor's social category). Structurally equivalent majority and minority
8 actors will not differ in the extent to which they identify influential individuals within their
9 networks. However, similarity between an actor and an alter is associated with higher levels
10 of support, and subsequently influences actors' perceptions of the usefulness of their network
11 ties (Ibarra, 1995). As such, majority actors will perceive their networks as being more useful
12 for career purposes as compared to minority actors because influential alters are more likely
13 similar to the majority social category, i.e., White, male. In contrast, minority actors might
14 perceive the same network as less useful to them because of greater incongruence between
15 their and the influential alters' social categories.

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31 Furthermore, an actor's perception of how legitimate it is to engage in career
32 utilization is associated with his or her confidence in succeeding in the leadership endeavor.
33 The assessment of legitimacy involves the congruence between the actor's social category
34 and the leader category, as well as the alignment of these categories with the existing social
35 status hierarchy. In majority-dominated social networks, minority actors' perceived
36 incongruence with a leader role can trigger feelings of stereotype threat (Steele & Aronson,
37 1995; Spencer, Steele, & Quinn, 1999; Burnette, Pollack, & Hoyt, 2010), and can lead to
38 them questioning their own legitimacy in striving for leadership advancement. Stereotype-
39 threatened individuals are reluctant to take on roles that are not consistent with the stereotype
40 that is attached to their social category (Keller & Dauenheimer, 2003), and often actively
41 avoid such roles altogether (Davies, Spencer, & Steele, 2005).

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55 Actors' decisions to engage in career utilization can also hinge on how they expect
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3 individuals in their networks to respond to their career utilization. Minorities might feel
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5 uncomfortable utilizing their network for career purposes because engaging in career
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7 utilization—communicating with their network that, contrary to stereotypical expectations, a
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9 leadership position would be a good fit for them—defies the existing social status hierarchy
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11 (Berger et al., 1980; Sidanius & Pratto, 2001; Mendes, Blascovich, Hunter, Lickel, & Jost,
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13 2007), and thus, might result in a rejection that damages their reputation. Although minorities
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15 might have more reason than majorities to want to change the social status hierarchy, they are
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17 also more likely to experience social sanctions for behaving in ways that are inconsistent with
18
19 the stereotype-based expectations associated with their social groups (e.g., gender effects,
20
21 Burt, 1997, 1998; Parks-Stamm, Heilman, & Hearn, 2008). When supported by alters who
22
23 also challenge the status hierarchy, minority actors might become more comfortable using
24
25
26 their networks for career-related purposes. Thus, the social category to which an alter belongs
27
28 is an important factor in actors' expectations of the success of their career utilization.
29
30 Additionally, actors' expectations about their network's implicit leadership theories can
31
32 shape their expectations about how appropriate their career utilization will be perceived by
33
34 their network. Stronger representation of similar others in positions of leadership will reduce
35
36 an actor's fear of rejection by the network.
37

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39
40 To summarize, even though career utilization of network ties is directly related to
41
42 leadership advancement, we posit that minority actors will engage less in career utilization
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44 than majority actors due to stereotype-based expectations of alters in their network, of
45
46 themselves, and of the actor-alter interaction. Given our assumption of a majority-dominated
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48 network, minority actors, as compared to majority actors, thus tend to perceive their networks
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50 as being less useful for career purposes, believe that engaging in career utilization is less
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52 legitimate, and expect more rejection from their network when they engage in career
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54 utilization. Conversely, majority actors view their networks as more useful for career
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3 purposes, view engaging in career utilization as more legitimate, and are more likely to
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5 expect successful outcomes from their career utilization.

6
7 *Proposition 1. Compared to majority actors, minority actors will engage in less*
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9 *career utilization of network ties, which contributes to minorities' lower leadership*
10
11 *advancement.*

12
13
14 **Work Utilization.** *Work utilization of network ties* refers to the actions an actor takes
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16 to engage his or her network ties with the purpose of improving his or her task performance.
17
18 Engaging in work utilization includes requesting a direct alter to provide input in terms of
19
20 information, technical help, and idea generation (Borgatti & Cross, 2003; Joshi & Knight,
21
22 2015) on the actor's project. An actor's work utilization of network ties has the potential to
23
24 improve that actor's performance because it allows for the integration of multiple
25
26 perspectives into the actor's task (Joshi, Liao, & Jackson, 2006), and gives an actor more
27
28 insight into the requirements of the task output. In addition, work utilization can improve the
29
30 visibility of the actor's knowledge, skills, and abilities among network connections. Although
31
32 work utilization might not translate into leadership advancement in the short term, over time,
33
34 network connections could turn to the actor for expertise-related opportunities.
35

36
37 Like the decision to engage in career utilization, an actor's decision to engage in work
38
39 utilization is driven by perceptions of usefulness, legitimacy, and expectations of success.
40
41 Unlike our predictions about minority/majority differences in career utilization, we propose
42
43 that majority and minority actors will not differ in their perceptions of how useful and how
44
45 legitimate engaging in work utilization can be, but will differ in their expectations of the
46
47 positive outcomes of work utilization.
48

49
50 We theorize that to assess the usefulness of a social network for task improvement,
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52 actors take into account both social network and social category factors: they identify the
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54 expertise present in the network and consider the social status of alters as defined by their
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3 social category. The requirements of the actor's job are compared to the ways in which alters
4 surrounding the actor can contribute to improving the actor's job performance. The decision
5 with whom to engage in work utilization is thus partly based upon what alters might add,
6 which is a structural factor that does not covary with the demographic characteristics of the
7 actor, assuming structural equivalence. A minority actor's network offers the same resources
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13
14 as a structurally equivalent majority actor's network, so minority and majority actors wanting
15
16 to improve their task performance will perceive their networks as offering equivalent
17
18 potential task contributions (Ibarra, 1995).

19
20 Furthermore, because engaging in work utilization would not defy the existing social
21 status hierarchy for minority actors, minority actors might feel less constrained about
22
23 utilizing their ties for work purposes. The legitimacy of utilizing ties for work purposes is
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25
26
27 often included in job descriptions, for instance, in the expectation to collaborate with
28
29 colleagues as part of the job requirements—particularly when teamwork is an important
30
31 feature of the job. Thus, minority and majority actors will likely perceive similar levels of
32
33 legitimacy regarding their decisions to engage in work utilization.

34
35 Expectations about realizing successful outcomes from engaging in work utilization,
36
37 however, can differ between minorities and majorities. Based on social categorization,
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39
40 minority actors might hesitate to engage in work utilization when it takes the form of seeking
41
42 help from their network connections because such actions could affirm stereotypes of low
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44 competence (Berger et al., 1980; Lee, 1997; Tessler & Schwartz, 1972; Brooks, Gino, &
45
46 Schweitzer, 2015). That is, minority actors who reach out for task-based help might be
47
48 perceived as underperformers or less knowledgeable and thus, thought to be less able to
49
50 reciprocate with expertise or task-based advice. Because individuals typically use their
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53 connections to maintain a fair, reciprocal exchange (Gouldner, 1960), this perception that
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55 minorities will not be able to reciprocate might curtail their chances of leadership

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3 advancement within the organizational context unless proactively managed over time. This
4 danger is especially acute for minority newcomers who have yet to form close working
5 relationships with alters (Morrison, 2002). In contrast, majority actors are unlikely to believe
6 that work utilization will affirm their incompetence because this is not a characteristic linked
7 to the majority stereotype, and thus cannot be affirmed with actions performed by the
8 majority actor.
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16 *Proposition 2. Compared to majority actors, minority actors will engage in less work*
17 *utilization of network ties, which contributes to minorities' lower leadership*
18 *advancement.*
19

20 21 22 **Differential effects of career and work utilization on leadership advancement.**

23 We posit that work utilization is generally a less effective activity in generating
24 leadership advancement outcomes than career utilization for both minority and majority
25 actors. Although work utilization can improve current job performance, it may not influence
26 alters' assessments of an actor's future job performance if a potential future job requires a
27 different skill set. A leadership role is associated with different requirements (cf. Borman &
28 Motowidlo, 1997) and stereotypes (cf. Sy, 2010) than a non-leader role. Thus, even though an
29 actor might have high in-role performance, which correlates with leadership advancement
30 (Ng et al., 2005), the actor's performance will not necessarily translate into the expectation
31 that he or she will perform well in a role that requires a different set of skills.
32
33

34 Moreover, when actors engage in work utilization, minority (as compared to majority)
35 actors are likely to benefit less, especially when opportunities involve some kind of
36 leadership. A minority actor who has demonstrated expertise on a different set of skills might
37 still be passed over. The reason for this differential effect is that minority actors who seek to
38 advance beyond specific skill-based tracks are subjected to more stringent competency
39 standards, as compared to majority actors (Foschi, 2000). Minorities generally need to
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3 demonstrate more work experience, more job-specific experience, and longer tenure before
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5 being promoted (Smith, 2005).

6
7 Take for instance the case of Hooria, who is not considered to lead her department's
8
9 new interdisciplinary project, despite having has a reputation for being an expert in statistics
10
11 and for always delivering high quality work. Her capabilities as a statistician do not
12
13 automatically spill over to competence judgments in other domains, such as leadership. The
14
15 social category to which she belongs forms a misfit with the leadership category such that she
16
17 is not perceived as possessing the requisite leadership qualities—despite defying the
18
19 expectations of the social category she belongs to with regard to her statistical abilities. This
20
21 example illustrates what scholars have shown: as compared to men, women's professional
22
23 progression to new positions tends to align closely with their previous skills-based
24
25 performance (Lyness & Schrader, 2006). A minority actor might improve his or her job
26
27 performance to become a more eligible candidate for a future job opportunity, but unless he
28
29 or she communicates this to alters within the context of their ongoing work exchanges, others
30
31 will be more likely to attribute the actor's work utilization simply to a desire to improve
32
33 current job performance, without inferring any career ambitions beyond that.
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35

36
37 *Proposition 3a. Compared to career utilization of network ties, work utilization of*
38
39 *network ties is less effective in producing leadership advancement, especially for*
40
41 *minority actors.*
42
43

44 Not only is career utilization more strongly related to leadership advancement than
45
46 work utilization, but we also expect that the difference between minority and majority actors'
47
48 career utilization, as described in Proposition 1, to be larger than the difference in work
49
50 utilization, as described in Proposition 2. This implies that minority actors suffer a “double
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52 disadvantage” when it comes to leadership advancement: Lower levels of career utilization
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54 are more detrimental to leadership advancement than lower levels of work utilization, and it
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3 is precisely on career utilization that minority and majority actors differ most.
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5 We reason that in assessing the usefulness, legitimacy, and expected success of career
6 utilization, implicit leadership theories play a more prominent role than in assessments
7 related to work utilization. Because career utilization has a stronger positive effect on
8 leadership advancement than work utilization, and because differences in career utilization
9 between minorities and majorities are larger than in work utilization, career utilization is
10 likely to create a more significant barrier to leadership advancement for minorities, as
11 compared to majorities. Thus, minority (as compared to majority) actors' lower career
12 utilization creates more unfavorable leadership advancement outcomes than differences in
13 work utilization. Figure 1 depicts the relationships between an actor's career and work
14 utilization and leadership advancement. We visually distinguish between the proposed
15 magnitude of these effects by varying the weight of causal arrows, demonstrating that career
16 utilization is at once a more influential driver of leadership advancement than work
17 utilization, and a more consequential obstacle to leadership advancement for minority than
18 majority actors.
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35 *Proposition 3b. The difference in career utilization between minority and majority*
36 *actors is larger than the difference in work utilization, which exacerbates differences*
37 *between minority and majority actors in leadership advancement.*
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42 Thus far, we have discussed the implications of network utilization for career and
43 work purposes by the actor. Actors, however, also have alters in their network who can wield
44 their influence to improve actors' leadership advancement outcomes. That is, just as actors
45 reach out to alters, these alters (i.e., superiors, peers, and subordinates) can contribute to the
46 actor's leadership advancement through career- and work-supporting network utilization
47 activities. Hence, we now examine how alters can facilitate actors' leadership advancement.
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55 **ALTERS' NETWORK UTILIZATION**

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3 Social categorization processes apply not only to actors' utilization of network ties,
4 but also to alters' willingness to engage in network utilization with actors. Both peer-level
5 alters and alters who are higher in the hierarchy can engage in network utilization with an
6 actor. Nevertheless, a hierarchically more powerful alter with job-assigning authority would
7 be expected to have a greater influence on an actor's leadership advancement (cf. Bian, 1997;
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13
14 Pieper, 2015). This is because these alters are not merely information providers (which peer-
15 level alters are likely to be), but also influential sources when it comes to making decisions
16 about promotions. Alters' network utilization with the actor can take the form of activities
17 supporting the actor's career activities (e.g., recommending the actor for a leadership position
18 because of his or her perceived leadership potential), and work activities (e.g., enlisting the
19 help of an actor because of his or her task-relevant expertise). We theorize about each path
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26
27 and their differential effects on actors' leadership advancement.

28 **Alters' Career-Supporting Utilization**

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31 Alters can be important sources of leadership opportunities, especially if they occupy
32 positions with job-assigning authority (Bian, 1997). Actors who want to advance into
33 positions of leadership usually have few direct ties to such influential alters because direct
34 alters are more likely to occupy a similar hierarchical position in the network (Granovetter,
35
36
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39
40 1992). Actors are likely indirectly connected to such influential alters, and the distance
41 between the actor and these indirect alters may range from a close connection via a direct
42 alter of the actor to a more distant one via several sequential alters.
43
44
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46 Individuals who occupy a network position between two disconnected others, or
47 "brokers," have a potentially strategic position from which they can control resource flow
48 (e.g., information) for their own advantage (Burt, 1992). Brokers can also use their position
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53 to bring together otherwise disconnected others without necessarily deriving self-benefits
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55 (Baker & Obstfeld, 1999). These brokers with a *tertius iungens* ("third who joins")
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3 orientation may decide to maintain coordination among newly formed connections or
4
5 relinquish their coordinating activities (Obstfeld, 2005). We refer to the latter brokers as
6
7 *referring brokers* in the following sections. An alter who has decision-making influence is
8
9 often informed by referring brokers who will vouch for an actor's leadership capabilities.

10
11 Referring brokers allow actors to tap into the indirect network, which provides a deep
12
13 pool of potentially beneficial resources. Such resources can include influence or valuable,
14
15 non-redundant information (Bian, 1997; cf. Granovetter, 1992) that can benefit actors' work
16
17 performance or leadership advancement. Indeed, actors benefit more from the resources their
18
19 indirect ties offer (Bian, 1997) than those offered from their direct ties. Actors are particularly
20
21 likely to benefit from indirect alters who are well-positioned in the organizational hierarchy
22
23 and have a reciprocal relationship with the referring broker. Influential alters can also benefit
24
25 from the indirect network, as it allows them access to a larger talent pool. Thus, referring
26
27 brokers play a key role in connecting an actor to an indirect alter (Pieper, 2015) by deciding
28
29 to which alter they will refer an actor and vice versa.

30
31
32 We theorize that social categorization processes will increase referring brokers'
33
34 selection of majority actors when advising influential alters who seek to advance actors into
35
36 leadership positions. Consider, for instance, that a referring broker has to engage in a memory
37
38 search to refer one individual to another. The human brain is incapable of activating the full
39
40 set of possible ties an individual has, and instead only a certain subset of ties is recalled when
41
42 an individual engages in such a memory search (Dunbar, 1992; Smith, Menon, & Thompson,
43
44 2012). As a result, social categorization processes can shape referring brokers' memory
45
46 search and selection processes to disadvantage minority actors in at least two ways: referring
47
48 brokers' recall of actors is primed by implicit stereotypes, and referring brokers make
49
50 referrals based on similarity in demographic attributes.

51
52
53 First, a referring broker who is probed by an alter to think about potential actors with
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3 “leader” attributes will prompt the recall of majority actors, based on their congruence with
4 implicit stereotypes (cf. Koch, D’Mello, & Sackett, 2015). As a result, referring brokers are
5 more likely to engage in career supporting utilization with majority actors than with minority
6 actors. Second, because social category primes referring brokers’ memory search (cf.
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Feldman, 1981), the referring broker is likely to recall an actor from the same social category as the alter (and vice versa) (cf. Schneider & Shiffrin, 1977; Shiffrin & Schneider, 1977). A minority actor is therefore more likely to be matched with another minority, and a majority with a majority—over and above the number of minorities versus majorities in the referring broker’s direct network. Referring brokers are thus less likely to refer a minority actor to a majority indirect alter. Given the dominance of majority actors in hierarchically superior positions, influential indirect alters are likely to belong to the majority category, which reduces the chances of a minority actor being connected by referring brokers.

Proposition 4. Referring brokers are less likely to refer minority, as compared to majority, actors to influential indirect alters. This lack of career-supporting network utilization by alters contributes to minority actors’ lower leadership advancement.

Collectively, referring brokers’ memory search and selection processes disadvantage minority actors because once a powerful alter offers a leadership opportunity, a referring broker is more likely to refer a majority actor than a minority actor to this alter. The referring broker is also more likely to match a majority alter to a majority actor based on social category similarity. This implies that if a minority actor requests a referral, the actor is less likely to be connected to a powerful alter because the referring brokers will have fewer powerful minority alters in their network (see Figure 2).

--- Insert Figure 2 about here ---

Alters’ Work-Supporting Utilization

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3 Alters engage in work-supporting utilization of an actor by requesting input from the
4 actor for a specific task because the actor has expertise in an area that the task or project
5 requires. When many alters utilize their tie to the same actor for work-related purposes, the
6 probability for leadership advancement of the actor increases substantially as the actor's
7 reputation for competence spreads through the organizational network. Indeed, reputation has
8 been found to predict individuals' hierarchical position and income (Blickle, Schneider, Liu,
9 & Ferris, 2011). Another positive outcome of a reputation for competence might be that the
10 actor could be considered for projects that require some form of informal leadership (such as
11 project management), which can build actors' leadership capabilities, making them more
12 eligible for future leadership positions.
13

14 Both peer- and higher-level alters can engage in work-supporting utilization with the
15 actor, but they are likely to differ in their influence on the actor's leadership advancement
16 outcomes. Peer-level alters are more likely to incorporate the actor's knowledge and expertise
17 in their own day-to-day jobs (much like how actors utilize their network for work purposes),
18 whereas higher-level alters are more likely to engage actors in longer-term projects.
19 Moreover, the actor's reputation for competence is more likely to grow among peer-level
20 alters before reaching higher-level alters. Information is more likely to be exchanged between
21 peers because they are usually more accessible than higher-level colleagues (cf. Borgatti &
22 Cross, 2003). This means that an actor's reputation will likely improve among the actor's
23 peers before it does so among higher-level connections.
24

25 All other things being equal—such as the actor's network position (i.e., structural
26 equivalence), function, or expertise—ties to a minority will be less utilized for work-related
27 purposes by their connections than ties to a majority (McGuire, 2002). As an illustration of
28 this phenomenon, consider the following example. Juana and John are biochemists in the
29 same department of an engineering firm, with similar knowledge and tenure. Both have a
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3 special aptitude for conducting experiments. However, Juana is far more likely than John to
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5 have her methods and findings questioned. Despite their equal expertise, their colleagues do
6
7 not question John's competence but they do question Juana's, in part due to prevailing
8
9 stereotypes about gender and scientific competency. In support of this phenomenon, Thomas-
10
11 Hunt and Phillips (2004) found that expert women were perceived as having less expertise
12
13 than expert men. Moreover, the more expertise the women possessed, the more their
14
15 teammates challenged their expertise, which translated to impaired team performance. The
16
17 possession of expertise alone does not translate to a reputation for competence; one needs to
18
19 be *perceived* as possessing expertise.
20

21
22 Social categorization processes detrimentally affect competency perceptions of
23
24 minority actors. Leslie and colleagues (2015), for instance, attribute the underrepresentation
25
26 of women and African Americans in certain academic fields to the low competence
27
28 stereotype associated with these social categories (as compared to White males). Because
29
30 minorities are generally viewed as less competent than majorities (cf. Berger et al., 1980;
31
32 Meeker & Weitzel-O'Neil, 1977; Fiske et al., 2002), alters are less likely to engage in work-
33
34 supporting network utilization with minority (as compared to majority) actors.
35

36
37 *Proposition 5. Compared to majority actors, alters are less likely to engage in work-*
38
39 *supporting network utilization with minority actors, which contributes to minorities'*
40
41 *lower leadership advancement.*
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43

44 Thus far, we have proposed that the leadership advancement of minorities is impeded
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46 by the social categorization processes that occur in their own and their alters' network
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48 utilization. Figure 1 depicts the relationships between alters' network utilization in terms of
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50 career-supporting utilization and work-supporting utilization, and actor leadership
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52 advancement. Here again, we visually distinguish between the proposed magnitude of these
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54 effects by varying the weight of causal arrows, demonstrating that career-supporting
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3 utilization is at once a more influential driver of leadership advancement than work-
4 supporting utilization, and a more consequential obstacle to leadership advancement for
5 minority than majority actors.
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8
9 It is important to note, however, that a core assumption in our theorizing has been that
10 the social network is majority-dominated. That is, we assumed a social network dominated by
11 majority group members (i.e., White men) where minority social categories give rise to low
12 competence stereotypes, and implicit leadership theories favor White and male social
13 categories for positions of leadership. Propositions 1 through 5 hold in majority-dominated
14 networks such that the more the network is majority-dominated, the more robustly we would
15 expect these relationships to exist. Nevertheless, although social categorization processes
16 pervasively influence network utilization, social categorization-induced biases are not
17 inevitable, especially in organizations that have network diversity at high levels of the
18 organizational hierarchy. In the following section, we examine how a diverse pool of
19 powerful alters can constrain the use of category-based stereotypes in the network utilization
20 processes that drive minority leadership advancement.
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36 **BOUNDARY CONDITIONS**

37 We began this article by delineating the tenets underlying our theory of network
38 utilization, derived from the theoretical foundations of social network theory, social
39 categorization theory, and leadership categorization theory. We now examine how relaxing
40 our core assumption of majority dominance can attenuate or enhance the conditions
41 determined by categorization processes (i.e., implicit leadership theories that favor White
42 men, and low competence stereotype for minorities). In particular, we analyze how network
43 diversity can mitigate the theorized differences between minorities and majorities in
44 leadership advancement that arise due to network utilization.
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55 **Network Diversity**

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3 A majority-dominated leadership network is an important reason why most
4 individuals' implicit leadership theories favor White men. Because implicit leadership
5 theories are shaped by individuals' experiences with leadership (Eden & Leviatan, 1975), a
6 majority-dominated network of leaders creates implicit leadership theories that align with the
7 demographics that are associated with the majority (Lord, Foti, & De Vader, 1984). The more
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13
14 White men are represented in positions of leadership, the more implicit leadership theories
15 align with expectations of leaders being White men. Greater network diversity throughout all
16 levels of the hierarchy can shape which characteristics employees consider prototypical for
17 leaders, reducing the strength of alters' implicit leadership associations to White and male
18 social categories.
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23
24 Correspondingly, network diversity can increase the number of powerful minority
25 alters in referring brokers' networks, thereby increasing the chances of minority actors being
26 referred to those powerful alters. Moreover, the support minority actors receive from
27 demographically similar alters (Zatzick, Elvira, & Cohen, 2005) can generate high quality
28 relationships that spill over to advice giving and seeking, a prediction consistent with the
29 principle of homophily (Ibarra, 1993, 1995). In this way, the usefulness, legitimacy, and
30 expected outcomes of minority actors' ties for career- and work-related purposes are
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40 enhanced.
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42 Because majority members are also more likely to subscribe to competence
43 stereotypes than minority members (Handley, Brown, Moss-Racusin, & Smith, 2015; Project
44 Implicit), having more majorities in influential positions strengthens the degree to which low
45 competence stereotypes are applied to minorities. Yet, as the representation of minorities
46 increases across roles and functions, so do opportunities for intergroup contact (Pettigrew &
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52 Tropp, 2006). As alters become exposed to individuating information, which often negates
53 stereotypic beliefs (e.g., a star woman engineer; cf. Bem, 1981; Glick, Wilk, & Perreault,
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3 1995; Leslie et al., 2015), their biased assumptions based on social category information
4
5 (Fiske & Neuberg, 1989; Fiske & Neuberg, 1990; Fiske, Lin, & Neuberg, 1999; Wood &
6
7 Karten, 1986) are diminished. Individuating information, in effect, can enhance alters'
8
9 understanding of within-category variability and between-category similarity. As a result,
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11 alters' reliance on stereotypes of low competence associated with minority social categories
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13 is reduced because individuating information overrides inaccurate stereotypes.
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16 Collectively, we posit that network diversity can mitigate differences in leadership
17
18 advancement outcomes between minorities and majorities that arise due to network
19
20 utilization.

21
22 *Proposition 6. Increased network diversity will reduce differences between minorities*
23
24 *and majorities in leadership advancement due to network utilization by (a) weakening*
25
26 *implicit associations between White and male social categories and leader prototypes,*
27
28 *(b) enhancing opportunities for intragroup support, and (c) diminishing associations*
29
30 *between stereotypes of low competence and minority actors through individuating*
31
32 *information.*
33

34 35 GENERAL DISCUSSION

36
37 Our theory of network utilization explains why minorities are underrepresented in
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39 leadership positions, over and above the structural constraints they face in creating social
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41 capital. Building on theoretical insights at the intersection of social network theory, social
42
43 categorization theory, and leadership categorization theory, we propose that the career and
44
45 work utilization of network ties differs across minority and majority actors. Minority actors
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47 engage less than majority actors in career utilization due to lower perceptions of the
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49 usefulness of their network for career purposes, hesitations about their legitimacy with regard
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51 to engaging in career utilization, and expectations of rejection. Minority actors also engage
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53 less in work utilization out of fear of confirming stereotypical expectations of incompetence
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3 associated with their social category. Moreover, even when minorities engage in network
4
5 utilization, their efforts are likely to create slower and less successful advancement
6
7 to leadership positions. Although alters can be a highly valuable resource for an actor's
8
9 leadership advancement, alters' network utilization can perpetuate their own biases in the
10
11 referrals they choose to make and the individuating information needed to override their
12
13 competency-based expectations of actors' social category. Taken together, our theory of
14
15 network utilization has important implications for both theory and practice.

16 17 **Theoretical Implications**

18
19 We have proposed that network utilization processes can explain why minorities in
20
21 structurally equivalent positions do not receive the same advancement benefits as majorities.
22
23 Consistent with past research, social structures provide opportunities and possibilities for
24
25 leadership advancement; however, scholars of this perspective have mainly studied
26
27 opportunity-based factors (Borgatti et al., 2009). We have developed theory on how actors
28
29 deliberately decide to use their existing ties. Although network position generally predicts the
30
31 utilization of majorities' existing ties, this may hold to a lesser extent for minorities. Thus,
32
33 when interpreting research on social networks, it should be kept in mind that these effects are
34
35 probably more applicable to majorities than to minorities, because network opportunities and
36
37 network utilization are more closely aligned for majorities than for minorities. Our work
38
39 creates an opportunity for an empirical investigation of the relative efficaciousness of
40
41 network position and network utilization for the leadership advancement of minority versus
42
43 majority actors.

44
45 Our framework also offers implications for theory on cognitive social network
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47 structures (see Brands, 2013, for a review). Cognitive social structures are individuals'
48
49 cognitive representations of the social network surrounding them and may or may not
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51 resemble the actual social network structure. These subjective perceptions include the way in
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3 which alters perceive the network and can be influenced by the demographics of actors
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5 (Brands & Kilduff, 2013; Brands, Menges, & Kilduff, 2015). This work implies that it is
6
7 important to study differences between minority and majority actors because their
8
9 perceptions of the *content* of the social network (i.e., the resources and opportunities
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11 available to them; cf. Ibarra, 1995) might differ while perceptions of the *structure* of the
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13 social network remain constant. These perceptual differences between minority and majority
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15 actors could lead to differences in network utilization, which in turn has implications for
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17 leadership advancement. By investigating cognitive structural representations of networks
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19 and the cognitive representations of the resources within these networks, we can advance our
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21 understanding of cognitive social structures as an antecedent of agency.
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24 Moreover, we have drawn heavily on research on gender and racial minorities in
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26 leadership positions due to a lack of research on other attributes than gender and race—
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28 generally restricted to research on African Americans, Latin Americans, and Asian
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30 Americans. Nevertheless, our aim is to provide theory that could be applied to a broad range
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32 of minorities. For instance, we not only think of a White male when we think about a leader
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34 (Eagly & Karau, 2002; Rosette et al., 2008), we also infer that he belongs to the majority in
35
36 other social categories, such as sexual preference, religious background, and disability. From
37
38 this perspective, social categorization processes can affect all minority social groups—even
39
40 when effects may be stronger for more easily discernable attributes such as gender and race.
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42 Indeed, social categorization processes as well as moderating influences apply to a wide
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44 range of attributes (van Knippenberg & Schippers, 2007).
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48 At the same time, it is important to note that not all minorities will be affected by
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50 social categorization processes in the same way. Some social groups' stereotypes overlap
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52 more with the leader category than others' (cf. Livingston, Rosette, & Washington, 2012).
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55 Indeed, it seems that the more stereotypical attributes of a social category are associated with
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3 higher competence, the stronger the association with leadership (cf. Todorov, Mandisodza,
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5 Goren, & Hall, 2005). The extent to which individuals benefit from network utilization is
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7 based on the congruity between their social group membership and leadership (for career
8
9 utilization) and competence (for work utilization). Some social groups are, for instance,
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11 associated with stereotypes of high competence (e.g., Asian social groups, Fiske et al., 2002),
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13 and therefore, constraints with regard to work utilization in particular may be less prominent
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15 for the members of these social groups as compared to other minority groups.
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18 Furthermore, different social category group memberships such as race, gender, class,
19
20 and sexuality can interact. For instance, stereotypes that are associated with White women are
21
22 different from stereotypes that are associated with Asian women or Black men; and even
23
24 within a single social category there might be different sub-categories, each with its own
25
26 stereotypes associated with them (Rosette, Koval, Ma, & Livingston, 2016). Investigating the
27
28 complex interplay of different minority group memberships—i.e., issues of intersectionality
29
30 (Sanchez-Hucles & Davis, 2010)—in network utilization processes would offer valuable
31
32 insights into understanding how belonging to multiple (as compared to one or none) minority
33
34 groups affects leadership advancement disparities via career and work utilization. For
35
36 instance, one way in which our theoretical framework might inform research on
37
38 intersectionality is that belonging to multiple minority groups affects stereotypes of lower
39
40 competence, and that these stereotypes affect career and work utilization of actors and alters,
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42 thereby offering a perspective on why some minority groups, e.g., Black women, are
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44 relatively more underrepresented compared to other minority groups, e.g., White women.
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47 Consistent with Ibarra's (1993) assertions regarding the constraints minorities face in
48
49 building an advantageous network, our research also predicts differential effects of
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51 homophilous versus heterophilous ties. In relation to network utilization, it might be easier
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53 for actors to engage in network utilization with homophilous rather than with heterophilous
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3 others (McPherson, Smith-Lovin, & Cook, 2001). This is consistent with Ibarra's conceptual
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5 argument that cross-gender and cross-race relationships will be weaker and less stable than
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7 homophilous ones (Ibarra, 1993: 71, proposition 8). One could also argue that homophilous
8
9 ties create higher levels of social capital particularly when it comes to the ease of reaching
10
11 out to a network connection. Yet, if we consider that both Whites and non-Whites endorse
12
13 Whiteness as a characteristic associated with the leadership stereotype (Gündemir et al.,
14
15 2014), engaging with similar others can be explained by individual differences in the
16
17 endorsement of normative fit. Future scholars should explore how network utilization
18
19 processes might vary across heterophilous versus homophilous ties, especially taking into
20
21 account that minorities and majorities usually do not have equal levels of social capital (i.e.,
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23 no structural equivalence).
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27 Our conceptual framework additionally has implications for research on diversity
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29 cognition (e.g., diversity beliefs, van Knippenberg, et al., 2007; diversity attitudes, Kossek &
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31 Zonia, 1993; diversity mindsets, van Knippenberg et al., 2013; multicultural [vs. color-blind]
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33 beliefs, Plaut, Thomas, & Goren, 2009) and diversity climates (McKay, Avery, Tonidandel,
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35 Morris, Hernandez, & Hebl, 2007; Mor Barak, Cherin, & Berkman, 1998). Research on
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37 diversity cognition has shown that individuals not only differ in the extent to which they hold
38
39 (negative) beliefs about social categories (Glick & Fiske, 1996; McConahay, 1986), but also
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41 the extent to which they embrace diversity (Dwertmann, Nishii, & van Knippenberg, 2016;
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43 van Knippenberg, van Ginkel, & Homan, 2013). Network diversity is likely to shape both
44
45 actors' and alters' understanding of difference as an asset from which the team or
46
47 organization can benefit. Hence, the more social categories are viewed as contributing to
48
49 important work capabilities, the less White and male social categories will be used in pattern
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51 matching and pattern completion processes by alters in network utilization.
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3 Likewise, an organization's diversity climate, which reflects employees' perceptions
4 that an organization adheres to fair personnel practices and the degree to which minority
5 employees are integrated into the work environment (Mor Barak et. al, 1998), is often
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7 manifest in both formal practices and explicit behavioral patterns (McKay et al., 2007).
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9 Different from diversity cognition, which reflects one's own perspective on diversity,
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11 diversity climate reflects one's perception of the organization's perspective on diversity.
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13 Favorable diversity climates are understood to be conducive to creating and maintaining a
14
15 diverse workforce (McKay et al., 2007), and promote the conditions under which such a
16
17 diverse workforce can thrive (Ely & Thomas, 2001).
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21 **Practical Implications**

22
23 Organizational structures, policies, and initiatives can be instrumental in influencing
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25 the network utilization of minorities (for a review, see Nishii, Khattab, Shemla, & Paluch,
26
27 2018). Networking programs, for example, could include training in effective networking
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29 with a focus on the unique constraints minorities experience when engaging in networking.
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31 Such training could focus on the difference between networking for career versus work
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33 purposes to provide minorities with insights into why and how to utilize their networks.
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35 Additionally, implementing structural changes to increase the representation of minorities,
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37 especially in influential managerial positions, could minimize the implications of referrals to
38
39 demographically similar others. Indeed, role models play an important part in enhancing
40
41 minorities' motivation and beliefs of self-efficacy when utilizing their networks for career
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43 purposes. Minority role models who have successfully moved up the hierarchical ranks could
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45 convey the importance of utilizing network ties for career purposes and could remove some
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47 of the uneasiness that minorities might feel when engaging in career utilization of network
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49 ties. To create sustainable change, organizations must implement more than a single practice.
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55 Moreover, it is important to realize that reducing social category salience by having
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3 more individuating information about minorities only works when individuals are directly
4 connected to minorities, as that is when individuating information about the actor typically is
5 available. Indirect connections to minorities result in reduced access to individuating
6 information and thus the reliance on social categories is not necessarily reduced. In practice,
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9 this means that organizational efforts to increase diversity should not only focus on creating
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13 diversity at lower levels, but throughout the organizational hierarchy. If organizations fail to
14 increase diversity throughout their entire hierarchy, minorities' leadership advancement may
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16 still stagnate due to social categorization processes in alters' career-supporting activities, such
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18 as referrals.
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22 An additional intervention that organizations could implement to mitigate referring
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24 brokers' cognitive search limitations is to use explicit language about gender, race, and other
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26 minority categories in intra-organizational leadership searches. By encouraging referring
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28 brokers to engage in thoughtful deliberation and evaluations of majority *and* minority actors
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30 in searching their network for leadership candidates, the automaticity of their cognitive
31
32 search based on social category information is disrupted. Although high power actors tend to
33
34 categorize more quickly, this effect is mitigated when they pay more attention to the
35
36 individual (Goodwin, Gubin, Fiske, & Yzerbyt, 2000). Thus, it is similarly important that
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39 indirect alters ask referring brokers for individuating information about candidates.
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42 Organizations also can improve minorities' leadership advancement outcomes by
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44 reducing the importance of career utilization for leadership advancement. Organizations with
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46 an up-or-out career structure, for instance, provide a career structure that targets the
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48 assumption of interest in leadership advancement. In such a structure, there is less need for
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50 individuals to alert their network of their desire to move up the hierarchical ladder because
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53 the structure dictates that everybody should be considered for a promotion. As an example,
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55 consider the academic tenure track requirement for untenured assistant professors: the
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3 expectation is that they remain with their employer because they want to attain promotion and
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5 tenure. Alternatively, when the structure of the organization is not up-or-out, targeted
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7 recruiting tactics such as organizing recruitment days for high potentials at predominantly
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9 minority or female institutions of higher education (Avery & McKay, 2006) can remove
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11 minorities' need to communicate their leadership aspirations. Additionally, taking the
12
13 question (or appropriateness) of one's career ambitions out of the equation helps level the
14
15 playing field for minorities because it eliminates the need for career utilization to
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17 communicate career ambitions.
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20 Structural substitutes for career utilization that target the assumption of interest in
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22 leadership advancement do not substitute for actions drawing attention to an individual's
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24 qualifications. If promotion decisions hinge on subjective evaluations of qualifications, those
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26 who engage in career utilization to advertise their qualifications enhance their chances of
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28 leadership advancement. With fewer objective criteria for leadership advancement, objective
29
30 performance becomes relatively less important, and the support of the network (i.e., career
31
32 utilization by actors and endorsement by referring brokers) becomes relatively more
33
34 important for leadership advancement. As such, implementing objective performance criteria
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36 is an important additional step that organizations can take to reduce the importance of career
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38 utilization for leadership advancement.
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40 41 42 **CONCLUSION**

43
44 Our theory of network utilization underlines the central role of individuals' active and
45
46 purposeful actions within the structure of their social network. In so doing, we explain how
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48 actors and alters can mitigate the psychological barriers associated with using their existing
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50 network ties. Notably, our research also sheds light on the role of alters in this process, which
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52 we hope is a call to action for those of majority categories to endorse minority actors in both
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54 career- and work-based capacities. By no means will social category salience ever disappear
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from the workplace. Yet, over time, as network diversity increases, the agency exerted by both actors and alters alike can produce an ever-equalizing playing field.

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FIGURE 1. CONCEPTUAL MODEL

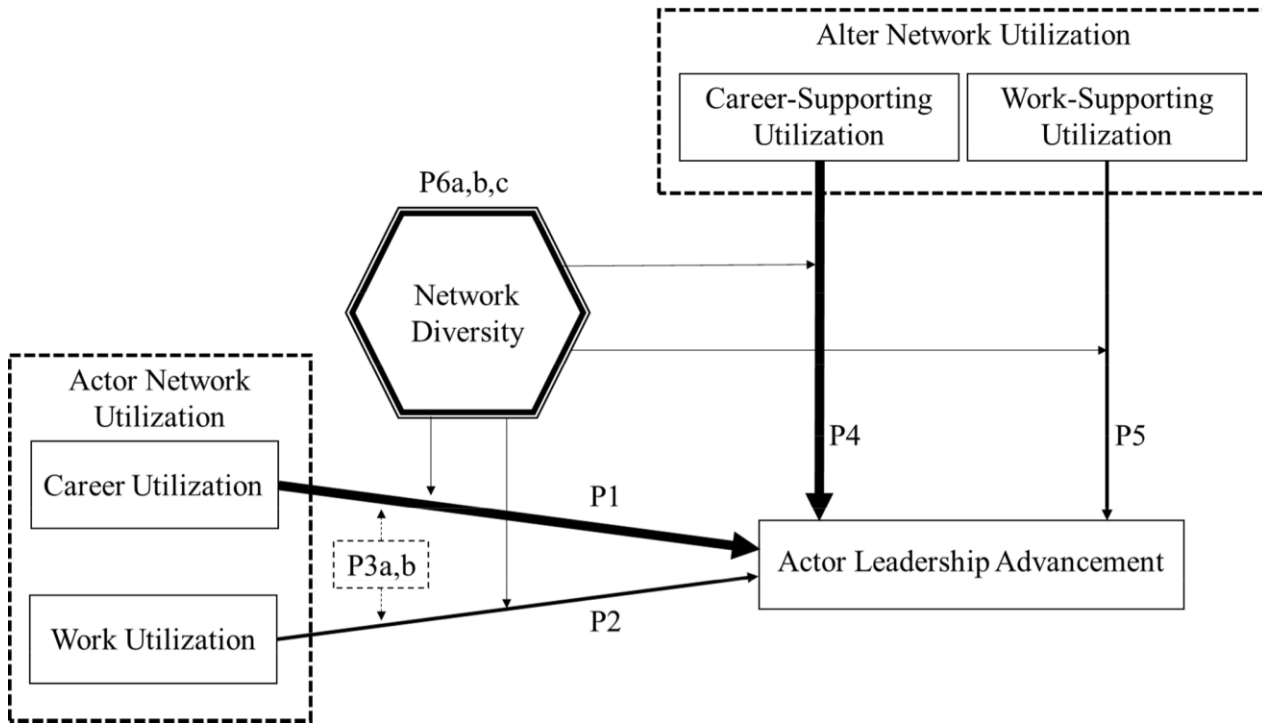
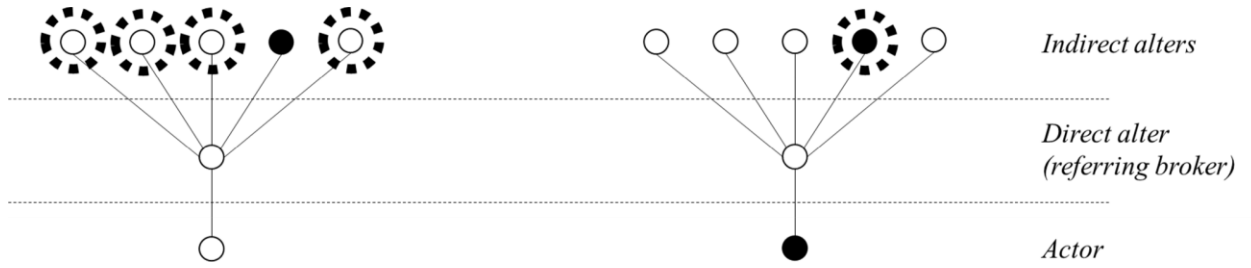


FIGURE 2. CAREER-SUPPORTING UTILIZATION: REFERRAL PROCESS



(a) A majority actor is more likely to be connected to majority alters.

(b) A minority actor is more likely to be connected to minority alters.

Legend:	
○	Majority member
●	Minority member