Social Science Research 38 (2009) 266–278

Contents lists available at ScienceDirect

Social Science Research

journal homepage: www.elsevier.com/locate/ssresearch

Does it pay to have a network contact? Social network ties, workplace racial context, and pay outcomes ☆

Julie A. Kmec *, Lindsey B. Trimble

Washington State University, Department of Sociology, Pullman, WA 99164-4020, USA

ARTICLE INFO

Article history:
Available online 20 January 2009

Keywords:
Social networks
Race/ethnicity
Pay

ABSTRACT

This article investigates how social network use to find work affects pay. Analyses using the Multi-City Study of Urban Inequality consider the extent to which a network contact's influence level affects a job applicant's pay, whether this effect differs for white, black, and Latino contacts, and how workplace racial context moderates this relationship. Three main findings emerge. First, having an influential contact—one with hiring authority—compared to having no contact yields higher pay. Second, white and minority contact influence on pay differs: among minority contacts, being an outsider (i.e., someone *not* employed by the firm to which the applicant applies) is associated with higher pay, but being an employee of the firm—an insider—is not. Third, regardless of workplace racial context, black and Latino contacts' influence is most beneficial when their race/ethnicity is not known to the hiring agent. We offer a new interpretation of the mixed findings with regard to the relationship between social network use and pay.

1. Introduction

Social networks are becoming increasingly central to scholarship on race and labor market inequality (see Fernandez and Fernandez-Mateo, 2006; Royster, 2003). A common practice—job seekers' use of informal referrals to acquire a job—is one example of a social network process in the labor market. A growing literature finds that job seeker reliance on social network ties affects pay, but research findings are equivocal about the direction of effect of social network ties on pay. Nearly as many find a negative relationship (Elliott, 1999; Elliott and Sims, 2001; Falcón, 1995; Falcón and Melendez, 2001; Green et al., 1999; Korenman and Turner, 1996; Mier and Golith, 1985) or null relationship (Bridges and Villemez, 1986; Coverdill, 1998; Elliott, 1999; Erickson, 2001) as a positive one (Aguilera and Massey, 2003; Granovetter, 1995; Green et al., 1995; Seidel et al., 2000; Smith, 2000) between job attainment through network ties and pay for workers from all race/ethnic backgrounds.[1]

This article sheds light on these ambiguous findings by studying the network use–pay link while paying attention to key features of the social network exchange. We are not the first to attempt to clarify the murky link between network use and pay. For example, Lin (1999) reviewed research investigating the relationship between contact status and employment outcomes. This body of research largely concluded that among those who used social network ties to find work, the higher the status/influence of a contact, the higher the pay outcome. Neckerman and Fernandez (2003), studying the relationship

☆ We thank Monica Johnson for her feedback. An earlier version of this paper was presented at the 2008 Pacific Sociological Association Meetings in Portland, OR.

* Corresponding author. Fax: +1 509 335 6419.
E-mail address: jkmec@wsu.edu (J.A. Kmec).

[1] Among these researchers, some found variation in the effects of social network use for subsets of workers (i.e., those in low-poverty versus high-poverty neighborhoods) (see Elliott, 1999).

0049-089X/$ - see front matter © 2009 Elsevier Inc. All rights reserved.
doi:10.1016/j.ssresearch.2009.01.003

between social network use and turnover, emphasized the role of workplace characteristics in shaping the mechanisms through which networks influence employment outcomes. Building on this body of work, we take into account the roles of contact influence, contact race/ethnicity, and along with them, workplace racial context when investigating the social network use–pay relationship. Contact race/ethnicity might moderate the effects of contact influence on pay because, simply, white contacts can make recommendations without having to consider their race, but minorities must consider theirs (Royster, 2003) and because minorities tend to have less powerful positions at work than whites. One workplace characteristic in particular, a workplace's racial context, may also play a role in the social network use–pay relationship. The racial composition of a workplace influences workers' experiences of racial boundaries at work, race consciousness, and pay (see Elliott, 1999; Browne and Tigges, 2001; Catanzarite, 1998, 2000; Catanzarite and Aguilera, 2002; Kmec, 2003) and may either exacerbate or reduce minorities' lower status at work. We ask three research questions:

(1) How does the influence level of a contact affect an applicant's pay?[2]
(2) To what extent does the effect of a contact's influence on pay vary according to the contact's race/ethnicity?
(3) To what extent does workplace racial context moderate the relationship between contact influence, contact race/ethnicity, and pay?

Our analyses combine important elements of previous work (e.g., Smith, 2000; Green et al., 1999; Fernandez and Weinberg, 1997). Like Smith (2000) we account for the level of workplace influence and race/ethnicity of the contact. Following Green et al. (1999), we take into account whether the contact is currently employed in the firm where the applicant is seeking employment, an important consideration for assessing the influence a contact can have on an applicant. Unlike previous research on the social network–pay relationship, however, we also consider the extent to which workplace racial context moderates the effects of contact characteristics on pay.

In the following sections we discuss the theoretical significance of social networks for the job matching process—the process whereby job seekers find jobs. Then we briefly discuss how social network contact use during the job search stage affects pay. The next two sections discuss how race—both that of the contact and of others in the workplace—complicates the relationship between a contact's influence and the extent to which a contact can affect his or her applicant's pay. Results demonstrate that having an outsider contact (e.g., a contact *not* employed in the firm to which the applicant applies) sometimes improves the pay levels of race/ethnic minority applicants. Regardless of workplace racial context, black and Latino contacts positively influence their applicants' pay when they have no contact with anyone in the hiring company—when their race/ethnicity is unknown to the hiring agent. We discuss the implications of results for our understanding of the racialized dynamics of social networks at work and what our findings mean for future research on the link between social network use and employment outcomes.

1.1. The job attainment process

The linking of job seekers to jobs is, perhaps, the most crucial step in the employment process: attaining a job gives people access to pay, networks, and future benefits. Like most aspects of employment, the process is not the same for all job seekers. Job attainment and employment outcomes, including pay, differ among those who use social network contacts to find jobs versus those that do not (see Granovetter, 1995; Mouw, 2003). Among social network contact users, job seekers' own race/ethnicity (Korenman and Turner, 1996), sex (Aguilera, 2008), and geographic location (Elliott, 1999; Elliott and Sims, 2001) play a role in attainment and employment outcomes. As gatekeepers, processors, and filters of job information for hiring agents and applicants, social network contacts can play a pivotal role in the job attainment process. As such, contacts' organizational (i.e., influence) and social characteristics (i.e., race/ethnicity) factor into the job attainment process. What is more, contacts do not provide assistance in a vacuum; they provide references, tell employers about applicants, and tell applicants about jobs in workplaces with varying racial contexts.

1.2. Social network contact use and pay

How does informal contact use in the job attainment process matter for pay? In general, informal network exchanges at work, even more so than formal exchanges, are the site of information sharing between individuals (Ipe, 2003). Contacts distribute and interpret information, pass along "know-how," offer difficult to obtain information (e.g., when the company will experience a labor demand), and open access to workplace networks to job applicants. Informal exchanges are thus critical to a job seeker's ability to properly time and complete his or her application, improve the effectiveness of a job search, appropriately present him or herself to the employer, know what wage to ask for, and even how to bargain for pay, all of which can potentially yield higher wages (Aguilera and Massey, 2003; Fernandez and Weinberg, 1997; Fernandez et al., 2000; Mouw, 2003; Seidel et al., 2000). Contacts can also distribute information to the hiring agent, especially information that does not necessarily circulate through formal, legal channels (e.g., the job applicant's trustworthiness or personality), that can help an

[2] We use the term "applicant" to refer to a respondent who relied on a social network tie when seeking a job because we study contact use in the job attainment stage, when the respondent was still a job applicant and not yet an employed worker.

employer screen applicants (see Powell and Smith-Doerr, 1994; Aguilera and Massey, 2003; Granovetter, 1995; Fernandez et al., 2000). In fact, because hiring through networks acts as a supplemental screening device, employers tend to believe that applicants obtained through network ties are more productive, less likely to turnover, and better aligned with the company culture than non-contacts (Aguilera and Massey, 2003). Thus, it is likely they remunerate contacts well to reflect their supposed economic benefits.

The use of social network contacts in the job attainment stage does not always guarantee better post-hire outcomes. Among other things, a contact's own status or influence affects an applicant's pay (for a review, see Lin, 1999). Social networks comprised of diverse and powerful members are critical for an applicant's resource acquisition because contacts with greater status are able to exert influence on decision-makers and processes that can benefit an applicant (see Brass, 1985; Kanter, 1977; Lin, 1999; Lin et al., 1981; McGuire, 2002). Benefits even accrue to job applicants thought to be aligned with highly influential others; employees labeled others as "good performers" if they perceived that s/he had a prominent friend at work (Kilduff and Krackhardt, 1994). Following previous research, we hypothesize:

Hypothesis 1: The greater a contact's influence at work, the greater the applicant's pay.

1.3. The color line at work

The color line at work complicates the relationship between a contact's influence and the extent to which a contact can affect an applicant's pay (see Vallas, 2003). Workplaces are not race neutral. Rather, they consist of informal patterns of interaction and affiliation that produce race and ethnic inequality at work. These inequalities manifest in subtle ways that can shape the effect of contact influence on pay. For example, workplace interactions can yield differences in power afforded to the same position held by members of different race/ethnic groups, race/ethnic difference in the extent to which a contact actively campaigns for or "teaches the ropes" to an applicant, and differences in the withholding or the sharing of job information on the part of contacts. In this section we discuss in greater detail how the color line at work affects variation in: (a) access to and use of power at work across contact race/ethnicity, and (b) the mobilization of social network relationships of white and minority contacts.

1.3.1. Access to power

A contact's race/ethnicity will affect the network use–pay relationship because members of various race/ethnic groups occupy different status levels at work and, thus, have access to information of varying value. Compared to whites, minority workers tend to find it more difficult to acquire the social support, job knowledge, and informal allies that benefit work rewards (Vallas, 2003). In the rare instances when whites and minorities do share positions of authority in the same workplace (see Smith, 2002), minority workers may not have the same power as whites (Kluegal, 1978). For example, Mueller and Parcel (1986) found that about 63 percent of black managers—but only 52 percent of white managers—reported having neither the power nor the responsibility to make decisions that directly affect subordinates. More recently, Anderson (1999, 2001) found that black executives in predominantly white settings felt they were constantly being watched, as if they did not belong. We hypothesize:

Hypothesis 2a: The effect of contact influence on pay will differ according to contact race/ethnicity.

1.3.2. Social network mobilization

The color line affects how whites and minorities mobilize social network relationships at work. Although all contacts, regardless of their race/ethnicity, may try to avoid mobilizing ties with "bad" applicants who pose a risk to their reputation, minority contacts may be more reluctant than whites to mobilize ties (see Coleman, 1990). Qualitative researchers have observed hesitancy, a general lack of cooperation, and even distrust among some employed minorities helping their job-seeking network ties. This hesitancy stems primarily from minority workers' perceptions that their positions at work are not as stable as whites' positions; they fear that providing a potentially "bad" referral could tarnish their reputation and lead to possible job loss (Newman, 1999; Royster, 2003; Smith, 2005, 2008).[3] When they do provide assistance, some minority contacts refuse to vouch for job seekers they know (Smith, 2005). So rather than reach out to applicants, minority contacts may distance themselves from them, making it difficult for applicants referred by minorities to mobilize beneficial network ties at work. This circumspection and hampered tie mobilization could translate into less influential help from black and Latino contacts—regardless of their influence or status at work—thus would manifest in a different effect of contact influence among white and minority contacts.[4]

Being an outsider contact—someone not currently employed by the company where the applicant seeks a job—may diminish the above described circumspection in minority contact's network assistance. Minority outsider contacts may feel less constrained to offer the kind of information that serves their applicant well for negotiating pay, timing an application, or even naming an authority figure at work with whom the applicant can speak because outsiders need not fear job loss or a

[3] Although these researchers studied getting a job and we focus pay, we expect that the interpersonal dynamics they identified will operate in the same manner for wages. Situations in which a contact displays distrust and a lack of cooperation with the applicant will undoubtedly negate the aforementioned benefits of contact use (i.e., help with timing applications, etc.).

[4] Applicants may feel a sense of social obligation to save their contact's reputation at work (Fernandez and Weinberg, 1997). We imagine that social obligation effects are weak or non-existent when one's contact suggests she or he "ignore" their connection.

tarnished workplace reputation. In other words, with nothing to lose at work, minority outsiders may go out on a limb, so to speak, to help their job-seeking network ties with information that could affect pay. We hypothesize:

Hypothesis 2b: The influence of black and Latino outsider contacts on applicants' pay will be greater than the influence of their insider counterparts.

1.4. Workplace racial context

The racial context of the workplace may be salient in the network use–pay relationship, especially for minority contacts. For contacts employed by the company to which they are referring their applicant, workplace context may moderate the extent to which their own race/ethnicity and influence affect applicants' pay because racial context affects the frequency and type of contact between and across race/ethnic groups, pay, and general racial dynamics at work (see Reskin et al., 1999).

Exactly how workplace racial context moderates contact influence and race/ethnicity remains ambiguous, however. On the one hand, co-ethnic contexts (e.g., for black contacts, working in a black setting) may exacerbate the already limited power and weakened social network mobilization on part of black and Latino employed contacts because of the low status and pay associated with minority-dominated settings (Elliott, 1999; Browne and Tigges, 2001; Catanzarite, 1998, 2000; Catanzarite and Aguilera, 2002; Kmec, 2003). On the other hand, co-ethnic contexts may mitigate whites' tendencies toward homosocial reproduction which disfavor minorities (Smith, 2002). By minimizing the pressures of tokenism, co-ethnic contexts may also reduce the hesitancy of minorities to help members of their network, making minority contacts more useful conduits of information to their applicant.

We would not expect workplace racial context to matter for contacts not part of the workplace they are referring applicants to (i.e., outsider contacts). Thus, we hypothesize:

Hypothesis 3: The effect of black and Latino insider contact's influence on pay will differ in co-ethnic versus non-coethnic settings.

2. Data, measures, and methods

2.1. Data

Analyses use data from the 1996 Multi-City Study of Urban Inequality (MCSUI) from Boston, Atlanta and Los Angeles (Holzer et al., 2000).[5] The MCSUI data were generated using a two-part sampling strategy yielding a total of 7373 observations for Los Angeles, Boston and Atlanta. Phase one of the sampling consisted of a multi-stage area probability sampling. Phase two included a size-weighted, stratified, probability sample of adult residents of the three metropolitan areas. Low-income and minority residents of each city were over-sampled. The response rates for Los Angeles, Boston and Atlanta were 68, 71, and 75 percent, respectively.

We excluded 2901 individuals from the analysis due to missing values on the dependent variable (this value includes 1226 cases because they were retired/too old to be working, 483 because they never worked, and 624 because they searched for their job more than 6 years prior to the survey, a screening criteria the MCSUI uses to eliminate respondents). Among those with valid responses on the pay measure, we excluded 431 self-employed and 1 employed by the military. We dropped 57 respondents whose contact helped him/her find a job in an "other" way because "other" ways of helping could include either weak assistance (e.g., the contact gave the respondent a job advertisement) or strong assistance (i.e., the contact introduced the respondent to the hiring agent). Combining weak and strong assistance would bias results. We also exclude 525 Asians, 73 "other" non-whites, and 163 respondents with either Asian or "other" non-white contacts because they are too few in number to include in multiple regression analyses. To account for potential sample selection bias due to the deletion of these cases, we estimated a Heckman selection model and calculated the inverse Mill's ratio (an estimate of probability of being included in the sample) (Breen, 1996). In models not shown, we then included the inverse Mill's ratio as a control variable in all of the regression models to account for potential selectivity bias. Substantive results were not different with the inclusion of the inverse Mill's ratio control, so we left it out of the presented models.

To test Hypothesis 1, we include all respondents, regardless of how they obtained their job ($n = 1769$). We limit the tests of Hypothesis 2 to respondents who used a white, black, or Latino/a contact to obtain their job ($n = 958$) because non-contacts, by definition, do not have scores on the contact influence or contact race/ethnicity measures and subsequently, drop from analyses. The sample is further limited in Hypothesis 3 when we examine only those respondents with black or Latino/a contacts who worked in co-ethnic versus non-coethnic settings ($n = 464$). We use listwise deletion to handle missing cases.

The MCSUI dataset is a natural choice for this analysis for several reasons. First, the MCSUI includes extensive information on respondents' social network ties, which are often difficult to identify. Second, over-sampling yields a large enough black and Latino sample on which to perform multiple regression analyses. Third, the MCSUI contains information on *how* a contact helped his or her applicant and whether or not the contact worked for the firm to which the applicant applied, both of

[5] The original survey included four cities: Detroit, Los Angeles, Boston and Atlanta. We exclude Detroit respondents because they were not asked questions about networks and social functioning, including questions about their use of contacts in the job attainment process.

which are necessary for accurately measuring a contact's influence. Fourth, the dataset includes proxies for workplace racial context which allow us to test the relevance of workplace racial context in the social network exchange.

2.2. Dependent variable

The outcome of interest is logged hourly pay at a respondent's current (or last) job.[6]

2.3. Independent variables

2.3.1. Contact influence

Models include a categorical variable indicating contact influence. We created this measure by combining responses from two questions: "What was the [one] main way this person [your contact] helped you?" and "Did/does this person [your contact] work for the firm by which you were hired?" We combined responses to create a 5-category variable, in most instances distinguishing between contacts employed in the firm where the applicant is seeking a job at the time the applicant applies (i.e., insider contacts) versus those that are not (i.e., outsider contacts):

(1) a contact hired the respondent;
(2) an insider contact provided a referral on behalf of the respondent;
(3) an outsider contact provided a referral on behalf of the respondent;
(4) an insider contact told the respondent about the job;
(5) or an outsider contact told the respondent about the job.[7]

Our measure represents varying levels of contact influence. We consider a contact that makes the hire to have the highest level of influence. The second most influential contact is an insider that provides a referral. Providing a referral has the potential to influence pay because employers often look to referrals for information that is difficult to discern from job applications, such as a job applicants' trustworthiness or friendliness, both of which could affect pay. Not only can a contact providing a referral provide extra information to an employer, but she or he can choose to withhold information about an applicant. For example, if a contact knows that a qualified referral has children yet perceives that his or her employer has a bias against parents, the contact can withhold information about the applicant's parent status. Consequently, referrals can serve as a buffer for applicants, as much as a source of information for potential employers. We consider contacts who merely tell a respondent about a job to have the least influence because they are not directly involved with the employing company—their help is one-sided in that it only benefits a job applicant, not the company to which the applicant applies.

Insider contacts should have greater influence than outsider contacts because insiders have access to employers, employee policies, informal advice on how to "get along" at work, and the sort of post-hire access to an applicant that enables mentorship and assistance (Fernandez and Weinberg, 1997; Kmec, 2007).

2.3.2. Contact race/ethnicity

Respondents identified the race/ethnicity of the person who helped him/her get a job. We measure contact's race with a set of dichotomous variables coded "1" if a contact was non-Hispanic white (hereafter, white), non-Hispanic black (hereafter, black), Asian, or Latino.

2.3.3. Workplace racial context

We measure workplace racial context with the combination of two measures. The first is a measure of the race/ethnicity of an *applicant's* supervisor (note, we do not have a measure of a *contact's* supervisor). Respondents reported the race or ethnic origin of their immediate supervisor, indicating that the person was either white, black, Asian, or Latino or something else. Second, we include a set of dichotomous variables indicating the respondent-reported race of most of the workers doing the same kind of work as the respondent in his/her establishment, what we call job race type. Respondents were asked: "What is/was the race and ethnicity of most of the employees doing the kind of work you do/did at this location?" and responded "mostly non-Hispanic white, mostly non-Hispanic black, mostly Hispanic, mostly Asian, mostly other race, or mixed race." We coded the variables "1" if they are either: mostly white, mostly black, mostly Latino, mostly Asian, mixed race, or mostly "other" non-white.

We combined an applicant's supervisor race/ethnicity variable and job race type variables to capture the racial context of a workplace, creating four dichotomous measures: white racial context coded "1" if a respondent's supervisor *and* job race type were both white and "0" otherwise; black racial context coded "1" if a respondent's supervisor *and* job race type were both black and "0" otherwise; Latino racial context coded "1" if a respondent's supervisor *and* job race type were both Latino

[6] A measure of starting pay would be ideal, as it is the pay level most likely affected by network use in the job attainment process. Nevertheless, survey respondents were only asked to record their current pay. Including a control for tenure with current employer minimizes bias associated with the use of current pay.

[7] To test Hypothesis 1, we include respondents who did not use contacts in models; respondents who used other methods are coded "0" on the contact influence measures.

and "0" otherwise; and "other" racial context coded "1" in instances where the supervisor and job race type do not match or when the supervisor is Asian or "other" non-white or if the respondent's job race composition was mostly Asian, mostly other, or mostly mixed race. Ideally, a workplace racial context measure would include a count of persons of each race/ethnicity in the workplace, but data limitations require use of this qualitative job-level measure. Nonetheless, the job race type measure combined with the race/ethnicity of a supervisor provides a reasonable proxy measure of workplace racial composition because of the tendency for supervisors to oversee like-race/ethnic subordinates (Smith, 2002). In other words, when a work setting employs a black supervisor and has a predominantly black job, it is likely the workplace has a high share of black employees as well.

2.4. Control variables

2.4.1. Individual level characteristics

To control for potentially higher pay of men compared to women, models include a dichotomous variable denoting a respondent's *sex* (female = 1; male = 0). A respondent's *race/ethnicity* is measured with a set of dichotomous variables coded 1 if a respondent is black, Latino, Asian, with non-Hispanic white as the reference category. We include a measure of worker *age* in years, and its square term (when statistically significant). Models include a control for *years of education* (respondents were limited to reporting a maximum of 17 years of education). *English skill* is measured as a respondent's combined English speaking and reading proficiency ranging from "1" (do not speak/read English well at all) to "4" (speak/read English very well). To capture differences in workplaces of non-natives, especially among Latinos, we also include a variable coded "1" if a respondent is *foreign born* and "0" if not. *Previous work experience* is the respondent's report of previous years of pre-hire experience (excluding schooling) in his or her current type of job. Logged t*enure* with current employer is the number of years a respondent has worked for his/her present employer. We include an employment status variable indicating the number of *hours usually worked* per week as well as a dichotomous variable coded "1" if a worker is *currently employed* and "0" if not. An individual's *city of residence* is measured with a set of dichotomous variables indicating residence in Boston or Atlanta (the reference category is Los Angeles).

2.4.2. Job level characteristics

Professional occupation is a dichotomous variable coded "1" if the respondent's 1990 3-digit Census occupation code is professional/managerial and "0" otherwise. Because minorities work in lower-skilled occupations than whites (e.g., England et al., 1999) and skill requirements of occupation are related to pay, we control for *occupation cognitive skill requirements* with a measure of the average experience, education, and on-the job training needed to perform the occupation. We code the skill measure 1–5 (1 = occupation needs little or no educational, experience, and training prep and 5 = extensive prep needed). We merged this measure onto MCSUI from the Occupational Information Network ("O*NET") 3.1 database (O*NET, 1998). The O*NET, which replaces the Dictionary of Occupational Titles, is a database measuring characteristics of 900 occupations. We aggregate these measures upward to the 496 occupations included in the 1990 Census occupational classification, following coding used by Reynolds (2006), and attach the aggregated values to respondents' 1990 Census 3-digit occupation codes using a crosswalk provided by the National Crosswalk Service Center. Models also include a dichotomous variable coded "1" if the job is covered by a *labor union or collective bargaining agreement* and "0" if not.

2.4.3. Establishment level characteristics

We control for *establishment size*—the natural log of the number of employees—to minimize its influence, no matter what direction, on wage estimates. Models also include a dichotomous variable coded "1" if the establishment is in the *private sector* and "0" if not.

2.5. Methods of analysis

We estimate ordinary least squares regression (OLS) models to predict logged hourly pay levels. We weight descriptive statistics with the MCSUI sample weights, but do not weight regression models (Winship and Radbill, 1994).

3. Results

Turning to our first independent variable of interest, contact influence, descriptive statistics in Table 1 reveal that roughly 4 percent of contacts had the highest level of influence: the ability to hire. Seventeen percent of contacts were insider referral, our second highest level of contact influence. Four percent of contacts were not employed in the firm but provided a referral. Finally, 25 percent of contacts told an applicant about a job—15 percent of those were insiders and 10 percent were not. The remaining 48 percent of applicants did not use a personal contact when seeking their job. White contacts are the most common (24 percent) followed by Latino (21 percent), and black contacts (7 percent). In supplementary analyses we examined how contact influence varied across race/ethnicity of the contact and found that the distribution does not change its shape when we examine it by race/ethnicity of the contact.

Table 1
Weighted descriptive statistics (standard deviations in parentheses), $n = 2327$.

	Mean	Range
Hourly wage (ln)	2.384 (.557)	0.727–4.744
Independent variables		
Contact influence		
Hired respondent	.044	0,1
Provided referral, insider	.169	0,1
Provided referral, outsider	.043	0,1
Told respondent about job, insider	.152	0,1
Told respondent about job, outsider	.104	0,1
Contact race/ethnicity		
White contact	.244	0,1
Black contact	.069	0,1
Latino contact	.209	0,1
Non-contact	.475	0,1
Individual-level characteristics		
Female	.487	0,1
Race/ethnicity		
White	.595	0,1
Black	.129	0,1
Latino	.277	0,1
Age	37.236 (11.205)	21–76
Years of education	13.234 (3.082)	0–17
English skill	3.567 (.933)	1–4
Foreign born	.255	0,1
Previous work experience	3.579 (5.952)	0–51
Tenure (ln)	1.534 (.906)	0.080–3.850
Hours worked per week	39.429 (10.897)	1–95
Currently employed	.793	0,1
City of residence		
Boston	.290	0,1
Atlanta	.130	0,1
Los Angeles	.580	0,1
Job characteristics		
Professional occupation	.296	0,1
Occupation cognitive skill	2.672 (.667)	1.124–4.467
Unionized job	.198	0,1
Establishment characteristics		
Workplace racial context		
White	.468	0,1
Black	.030	0,1
Latino	.110	0,1
Other	.392	0,1
Establishment size (ln)	4.225 (1.903)	0.693–9.210
Private sector establishment	.816	0,1

Notes. Source, 1992–1994 MCSUI, household survey and O*NET.

3.1. Contact influence

To test Hypothesis 1—the greater a contact's influence at work, the greater the applicant's pay—Table 2 displays results of a model regressing a job applicant's pay on measures of contact influence and a host of control variables for those who obtained their job through a contact and those who did not.

For this analysis, a non-contact method of job attainment (i.e., responding to a newspaper advertisement, etc.) is the omitted category, so we compare contact influence measures to non-contact methods. Two types of contact influence significantly affect pay compared to non-contact methods: respondents whose contact has hiring authority or who is an outsider that told a respondent about the job receive higher pay than non-contacts. Having a contact with hiring authority yields a roughly 11 percent higher net pay level than if the applicant did not rely on personal contact use in the job attainment process (the omitted category). Having an outsider contact who told an applicant about the job results in a net seven percent higher pay level than if the applicant did not use a personal contact during the job search. The effects of having a contact referral or having an insider tell a respondent about the job are no different than using non-contact methods in the job attainment process. Thus, we find mixed support for our first hypothesis. Our next set of analyses elucidate, in part, a reason for our unexpected finding with regard to the positive effect on pay of being told about a job by an outsider during the job attainment process.

Table 2
Unstandardized coefficients from the OLS estimation of logged hourly wage, contacts vs. non-contacts, $n = 1769$.

	β	Std. error
Independent variables		
Contact influence (ref: non-contact)		
Hired respondent	0.111*	(.046)
Provided referral, insider	0.009	(.027)
Provided referral, outsider	−0.002	(.043)
Told respondent about job, insider	−0.006	(.025)
Told respondent about job, outsider	0.068*	(.031)
Individual-level characteristics		
Female	−0.106***	(.019)
Race/Ethnicity (ref: white):		
Black	−0.056*	(.025)
Latino	−0.036	(.033)
Age	0.031***	(.006)
Age Squared	−0.0004***	(.0001)
Years of education	0.034***	(.004)
English skill	0.030	(.016)
Foreign born	−0.058	(.032)
Previous work experience	0.013***	(.002)
Tenure (ln)	0.159***	(.014)
Hours worked per week	−0.001	(.001)
Currently employed	0.136***	(.020)
Job characteristics		
Professional occupation	0.162***	(.031)
Occupation cognitive skill	0.074***	(.020)
Unionized job	0.174***	(.027)
Establishment characteristics		
Workplace racial context (ref: white)		
Black	−0.185***	(.034)
Latino	−0.136***	(.035)
Other	−0.096***	(.022)
Establishment size (ln)	0.028***	(.005)
Private sector establishment	0.023	(.027)
Intercept	0.584***	(.143)
Adjusted *R*-square	.47	

Notes. Standard errors in parentheses; models also include controls for city of residence but coefficients not included in table. Analyses not weighted. Inclusion of the inverse Mill's ratio, which serves as a measure of the probability of being selected into the sample, as a control does not change substantive results (see Breen, 1996).
Source: 1992–1994 MCSUI, household survey and O*NET.
* $p < .05$.
** $p < .01$.
*** $p < .001$ (two-tailed test).

3.2. Does contact influence depend on contact race/ethnicity and outsider status?

Table 3 presents models testing Hypothesis 2a—the effect of contact influence on pay will differ according to contact race/ethnicity—and Hypothesis 2b—the influence of black and Latino outsider contacts on applicants' pay will be greater than the influence of their insider counterparts.[8] The reference group for the contact influence measure in these analyses is an insider referral because it is the largest category, thus its omission minimizes statistical bias.[9]

Among respondents with white contacts (Column I), none of the measures of contact influence have a statistically significant effect on pay. In Column II, having a black outsider contact who told a respondent about a job yields a roughly net 12 percent increase in pay compared to those whose black contacts were insider referrals (the omitted influence category). Similarly, those with a Latino outsider contact who told a respondent about a job earn roughly 13 percent greater more than those whose Latino contacts were insider referrals (Column III). *T*-tests reveal that the differences between black contact and Latino contact are not significant, but that differences between white and minority contacts are. Thus, we find some support for Hypothesis 2a: contact influence on applicants' pay differs for white and minority contacts. At the same time, we find support for Hypothesis 2b. As expected, among minority contacts outsider influence has a greater effect on an applicant's pay than insider influence. None of the insider influence measures are significantly related to pay among applicants whose con-

[8] From this point on, analyses only include those who used a contact when trying to find a job because non-contact users cannot report, by definition, information on the race/ethnicity or influence level of their contact.
[9] We conducted statistical tests to discern if categories of the influence measure were significantly different from one another. From these, we conclude that "outsider, told respondent about a job" is significantly different from all categories of influence except "contact has authority to hire."

Table 3
Unstandardized coefficients from the OLS estimation of logged hourly wage, by contact race/ethnicity.

	I White contact	II Black contact	III Latino contact
Independent variables			
Contact influence (ref: insider referral)			
Hired respondent	0.074 (.070)	0.161 (.098)	0.157 (.115)
Provided referral, outsider	−0.087 (.080)	0.010 (.094)	0.048 (.060)
Told respondent about job, insider	0.025 (.057)	0.008 (.060)	−0.013 (.041)
Told respondent about job, outsider	**−0.068 (.069)**	**0.124* (.064)**	**0.131* (.057)**
Individual-level characteristics			
Female	−0.095* (.046)	−0.078 (.046)	−0.131*** (.038)
Race/ethnicity (ref: white)			
Black	−0.074 (.080)	−0.190 (.010)	−0.091 (.150)
Latino	0.034 (.072)	0.002 (.143)	−0.145 (.103)
Age	0.048*** (.014)	−0.001 (.003)	0.005* (.002)
Age squared	−0.001** (.0002)	—	—
Years of education	0.044*** (.010)	0.057*** (.013)	0.017** (.006)
English skill	0.035 (.046)	−0.082 (.060)	0.066** (.022)
Foreign born	−0.035 (.077)	−0.149 (.088)	−0.009 (.060)
Previous work experience	0.012*** (.004)	0.007 (.005)	0.012* (.005)
Tenure (ln)	0.178*** (.032)	0.154*** (.037)	0.185*** (.030)
Hours worked per week	0.002 (.002)	0.001 (.002)	−0.007*** (.002)
Currently employed	0.136** (.048)	0.134** (.047)	0.008 (.038)
Job characteristics			
Professional occupation	0.105 (.073)	0.232** (.084)	0.148 (.091)
Occupation cognitive skill	0.122* (.051)	−0.013 (.050)	−0.023 (.041)
Unionized job	0.136 (.080)	0.131* (.064)	0.127** (.049)
Establishment characteristics			
Workplace racial context (ref: white)			
Black	0.001 (.140)	−0.190** (.068)	−0.210 (.147)
Latino	−0.158 (.121)	−0.174 (.131)	−0.104 (.074)
Other	−0.077 (.048)	−0.127* (.062)	−0.100 (.071)
Establishment size (ln)	0.040** (.013)	0.027* (.013)	0.023 (.013)
Private sector establishment	0.041 (.072)	−0.131* (.059)	−0.018 (.070)
Intercept	−0.230 (.376)	1.759*** (.327)	1.667*** (.219)
Adjusted *R*-square	.53	.32	.39
N	263	329	366

Notes. Standard errors in parentheses; models also include controls for city of residence but coefficients not included in table. Bold coefficients indicate a statistically significant difference ($p < .05$) between the contact influence coefficients for white contacts (Column I) and minority contacts (Columns II and III) according to a one-tailed *t*-test, $t = [(b_w - b_m) \sqrt{s_{bw}^2 - s_{bm}^2}]$, where b is the coefficient and s_b^2 is the standard error of the coefficient for white and minority contacts (we estimate separate tests for black and Latino contacts) (see Wilmoth and Koso, 2002). Contact influence coefficients are not significantly different between blacks contacts (Column II) and Latino contacts (Column III). Inclusion of the inverse Mill's ratio, which serves as a measure of the probability of being selected into the sample, as a control does not change substantive results (see Breen, 1996). Analyses not weighted.
Source: 1992–1994 MCSUI, household survey and O*NET.
* $p < .05$.
** $p < .01$.
*** $p < .001$ (two-tailed test).

tacts are minority. Interestingly, among those with white contacts, no form of influence affects pay. The final analyses we present seek to identify whether workplace racial context moderates the effects of contact influence and race/ethnicity on pay.

3.3. Does workplace racial context make a difference?

To test the possibility that the effect of contacts' influence and race/ethnicity on pay will differ in co-ethnic versus non-coethnic settings (Hypothesis 3), Table 4 displays a pay model by both contact race/ethnicity and workplace racial context. Because so few white contacts worked in non-coethnic (i.e., non-white) settings ($n = 32$), we do not estimate models for respondents with white contacts.

We turn first to the analysis for black contacts in co-ethnic settings (Column I). Among those with a black outsider contact in a black workplace setting, being told about the job by the contact is associated with a higher pay level than if the black contact was an insider referral (the omitted category). Specifically, the wages of those whose black outsider contact told them about the job are roughly 33 percent greater than the wages of applicants whose employee contact provided a referral, net of controls. No other type of contact influence affects pay among applicants with black contacts in co-ethnic settings. In non-coethnic settings (Column II), black contacts' influence levels are not significantly related to pay.

Table 4
Unstandardized coefficients from the OLS estimation of logged hourly wage, by contact race/ethnicity and workplace racial context.

	I Black contact, co-ethnic setting	II Black contact, non-coethnic setting	III Latino contact, co-ethnic setting	IV Latino contact, non-coethnic setting
Independent variables				
Contact Influence (ref: insider referral)				
Hired respondent	0.190 (.161)	0.107 (.158)	0.206 (.120)	−0.045 (.326)
Provided referral, outsider	−0.120 (.189)	0.245 (.136)	0.102 (.087)	0.053 (.161)
Told respondent about job, insider	0.026 (.117)	−0.002 (.095)	0.072 (.057)	−0.066 (.115)
Told respondent about job, outsider	0.328* (.129)	−0.003 (.095)	0.123 (.092)	0.268† (.139)
Individual-level characteristics				
Female	−0.053 (.088)	−0.059 (.072)	−0.099 (.054)	−0.037 (.105)
Race/ethnicity (ref: white):				
Black	−0.546 (.327)	−0.001 (.119)	0.007 (.336)	−0.147 (.278)
Latino	−0.072 (.419)	0.053 (.182)	−0.115 (.298)	0.045 (.198)
Age	−0.002 (.006)	−0.002 (.004)	0.003 (.003)	0.010† (.005)
Years of education	0.063** (.023)	0.024 (.022)	0.006 (.008)	0.011 (.020)
English skill	−0.133 (.143)	−0.021 (.080)	0.073* (.032)	0.059 (.068)
Foreign born	−0.280 (.164)	−0.128 (.121)	−0.081 (.101)	−0.172 (.137)
Previous work experience	0.005 (.012)	0.023* (.010)	0.011 (.006)	0.042* (.020)
Tenure (ln)	0.109 (.072)	0.212*** (.054)	0.179*** (.042)	0.172* (.086)
Hours worked per week	0.0004 (.004)	0.003 (.004)	−0.009** (.003)	−0.007 (.004)
Currently employed	0.237* (.093)	0.130† (.072)	0.061 (.053)	0.044 (.118)
Job characteristics				
Professional occupation	0.438** (.165)	0.190 (.153)	−0.018 (.198)	0.384* (.172)
Occupation cognitive skill	−0.157 (.096)	0.090 (.076)	0.030 (.067)	−0.092 (.099)
Unionized job	0.034 (.148)	0.072 (.090)	−0.013 (.079)	0.198 (.121)
Establishment characteristics				
Establishment size (ln)	0.067* (.027)	0.015 (.020)	0.046* (.020)	0.021 (.029)
Private sector establishment	−0.057 (.123)	−0.087 (.101)	−0.116 (.119)	0.203 (.144)
Intercept	2.107* (.814)	1.368*** (.416)	1.631*** (.421)	1.365* (.526)
Adjusted *R*-square	.40	.35	.30	.36
n	108	114	159	83

Notes. Standard errors in parentheses; models also include controls for city of residence but coefficients not included in table. Inclusion of the inverse Mill's ratio, which serves as a measure of the probability of being selected into the sample, as a control does not change substantive results (see Breen, 1996). Analyses not weighted.
Source: 1992–1994 MCSUI, household survey and O*NET.
† $p = .059$.
* $p < .05$.
** $p < .01$.
*** $p < .001$ (two-tailed test).

Turning now to Latino co-ethnic settings (Column III), among those with Latino contacts, Latino contacts' influence is not significantly related to the pay levels of his or her applicant. In non-coethnic settings (Column IV), however, we observe that net pay levels of applicants whose Latino outsider contacts told them about the job are positive yet only marginally significant ($\beta = 0.27$, $p = .059$).[10] The net wages of those whose Latino outsider contact told them about the job were roughly 27 percent greater than the wages of applicants whose Latino insider contact provided a referral (the omitted category).

4. Discussion and conclusions

Having an influential contact—one with the authority to hire—yields higher pay than using no contact to find a job. The effect of having a contact with the highest level of influence remains net of a host of controls for individual, job, and establishment characteristics, including an applicant's own race. Previous research has demonstrated that contacts primarily influence their applicants' pay levels through the transmission of insider workplace information and by developing network ties at work for the applicant. Certainly, a contact with hiring discretion has access to valuable information and other workplace networks that can benefit the applicant's pay levels. We imagine that a contact with hiring discretion is also

[10] In models not shown, we estimated pay without controlling for workplace race/ethnic composition. In the absence of this control, blacks earn significant less than whites and Latinos earn the same as whites. The addition of workplace racial context captures the effect of individual-level race in the full models.

responsible for setting workers' pay levels, so the observed link between hiring influence and pay is not surprising. In fact, our finding that influential contacts—ones connected to powerful networks at work—influence job outcomes confirms previous research (e.g., Smith, 2000; Green et al., 1999; Lin, 1999).

Less consistent with previous research, however, is our finding that contacts with the *weakest* level of influence—outsider contacts who told an applicant about a job—also have a significant, positive effect on the pay levels of their contacts (compared to non-contacts, the omitted category). The unanticipated effect of this weak influence on pay indicates that processes beyond the transmission of insider information and access to workplace networks affect pay levels. When estimating pay models by contact race/ethnicity, we found that minority contacts (not white contacts) with what is theoretically the lowest level of influence—outsider contacts who tell an applicant about a job—yield a pay premium for applicants (see Table 3).

Though our data analysis cannot provide a definitive answer to the question of why minority contacts influence pay when they are outsiders, we offer two plausible interpretations of this finding. First, minority contacts who are *not* employed at the firm in which they are referring their contact do not have a workplace reputation—or a job—to maintain when referring an applicant. Consequently, their exchanges with applicants are "risk free." Without a job or reputation at stake, outsiders need not hesitate when offering advice, thus are more likely to transmit information that translates into an economic gain for their applicant. In this sense, social network mobilization among minority contacts is easier without having to consider how their race/ethnicity may affect their economic position. The null effects of the other forms of influence suggest that having power at work does not diminish the stakes for minority contacts—even those with hiring authority may be less likely to extend themselves out of fear they will make a mistake and it will cost them at work. A sample of contacts, not of applicants which is what is available in the MCSUI dataset, is necessary to further investigate this explanation.

The second interpretation of the finding that black and Latino outsiders who provided job information have a positive effect on an applicant's pay is that in this situation, a contact's race/ethnicity is unknown to the hiring agent and thus not subject to an employer's scrutiny or stereotypes. The only time black and Latino contact use increased applicants' pay levels was when the applicant did not have direct contact with the hiring agent. The case of an outsider providing job information to an applicant is the only situation in which a contact's race/ethnicity cannot "interfere" with the job attainment process. All of the other types of influence, regardless of whether the contact is an insider or outsider, require interaction between the contact and the hiring agent and subsequently open the door for employer racial biases to shape the job attainment process and subsequent outcomes. For example, even an outsider contact that provides a referral typically has to speak to someone at the employing company (written referrals for the types of jobs we observe here are unlikely).

The positive effect of contact influence in the absence of "racial interference"—at least among minority contacts—tells us something important about racial dynamics at play in the social network process. Researchers have primarily theorized that social network contacts exert influence in two ways: they benefit applicants by instructing them about how and when best to apply *and* they benefit employers by providing difficult to obtain information on which to screen applicants. Our findings, however, suggest that insider contacts—whom the employer presumably relies on for difficult to obtain information—offer no benefits to the applicants above and beyond outsider contacts. It may be that employers do not rely on some insider contacts like previously thought. Perhaps white employers are less likely to take a referral from a minority contact seriously because employers view minority contacts as unreliable screening devices (Aguilera and Massey, 2003). If most hiring agents are white (Smith, 2002), perhaps they do not trust minority contacts (McPherson et al., 2001). The fact that other forms of influence—having the ability to hire or being an outside referrer—have no effect on pay among those with black or Latino contacts also supports this notion. Due to data limitations, we are unable to examine how a hiring agent's race/ethnicity of management race/ethnic composition may affect the extent to which minority referrals are taken seriously.

Although white contacts had no effect on their applicants' pay levels, we anticipate this had more to do with the outcome under study than with the power of whites at work. Perhaps whites are paid well *regardless* of how they got their job because of their power at work so distinguishing between how whites attained their job does not matter for this sample because all methods of job attainment result in a pay premium for them. It may also be that whites exert their influence in the hiring stage; that is, in getting their applicants hired to begin with. A growing body of literature suggests that whites may go above and beyond to help their (mainly white) network contacts find work (see Royster, 2003).

In what workplace contexts do racial minority contacts' have the greatest influence? It turns out that blacks in co-ethnic settings see a larger wage premium from outsider contacts who told them about their job than blacks in non-coethnic settings. Latino co-ethnic settings are not systematically more likely to reduce negative experiences of minorities or exacerbate tokenism than non-coethnic settings. In fact, Latinos benefit economically (although only marginally, $p = .059$) from outsider job information in *non-coethnic* settings. Thus, we find no systematic support for our third hypothesis which, recall, focused on *insider* contact influence. What matters more systematically than working with co-ethnics is a contact's own race/ethnicity. For the most part, regardless of workplace racial context, minority contacts are most beneficial when their race/ethnicity is unknown to the hiring agent. We cannot ignore, however, the fact that our measure of workplace racial context—a combination of the race of an applicant's supervisor and job race type—may not accurately capture the race/ethnic composition of the entire workforce. Nor do we have a measure of the race/ethnicity of a contact's own supervisor or the race/ethnic composition of those in management. These alternative measures are necessary to capture additional effects of workplace racial context.

The analyses in this article have shed light on our understanding of the interplay between social network tie use, race/ethnicity, and pay. In the introduction, we highlighted the mixed findings with regard to the social network use–pay relationship—some have concluded that using networks increases pay, others concluded it decreases pay, while others found

network has no effect on pay. Our findings suggest these mixed findings may be due to network use measures that do not account for the joint effects of contact's influence, insider status, and race/ethnicity. In this sense, our findings emphasize the racialized dynamics of social networks at work: job applicants can benefit from network use in the job attainment stage, but tend to do so when a contact's race does not play interference with the attainment process. Models that do not differentiate between an insider versus outsider contact or the race/ethnicity of the contact will misstate the impact of network use.

Our analyses are not without data limitations. To begin, we limited our tests of Hypotheses 2–3 to networked job entrants (those who used a social network contact in the job attainment process). It may be that non-contacts fare even worse in terms of pay because they do not have network connections that can assist them with the timing and negotiating of their pay. Thus, we may understate the effects of contact race/ethnicity and influence on pay. As previously noted, our measure of workplace racial context is not perfect; it may understate contextual effects and the extent to which workplace characteristics shape the mechanisms through which networks affect pay. And like others, we do not have detailed information about the contact's interaction with the employer (i.e., what he or she said to an employer about the applicant) or with the applicant (i.e., what a contact told an applicant about a job). With our general measure of contact influence, we are likely capturing a range of forms of assistance thus future research should strive to identify the mechanisms whereby networks matter for pay outcomes.

Our analyses demonstrate the need to account for a contact's influence, race/ethnicity, and insider position to understand the mechanisms whereby social network ties affect pay. Knowing this, future research seeking to understand the role of social networks in the maintenance of labor market inequality should pay close attention to the characteristics of informal information exchange and how these vary across contact race/ethnicity. Future research should also consider how the contact characteristics we have identified might matter for other post-hire outcomes such as tenure/turnover, promotions, and pay trajectories. As others before us have already noted, detailed data on *how* a contact helped an applicant (i.e., the content of the information exchanged, the type of referral s/he provided, whether the contact provider spoke directly to the person in charge of hiring) and how this help varies by the race/ethnicity of the contact and applicant are necessary. Analyses of these types will shed further light on the mechanisms that make some social network exchanges, but not others, economically beneficial and the extent to which minorities and whites differently mobilize their influence at work.

References

Aguilera, Michael B., Massey, Douglas S., 2003. Social capital and the wages of Mexican migrants: new hypotheses and tests. Social Forces 82, 671–701.

Aguilera, Michael B., 2008. Personal networks and the incomes of men and women in the United States: do personal networks provide higher returns for men or women? Research in Social Stratification and Mobility 26, 221–233.

Anderson, Elijah, 1999. The social situation of the black executive: black and white identities in the Corporate World. In: Lamont, Michele (Ed.), The Cultural Territories of Race: Black and White Boundaries. University of Chicago Press, Chicago, pp. 3–29.

Anderson, Elijah, 2001. The social situation of the black executive: black and white identities in the Corporate World. In: Anderson, Elijah, Massey, Douglass S. (Eds.), Problem of the Century: Racial Stratification in the United States. Russell Sage, NY, pp. 405–436.

Bridges, Wiliam P., Villemez, Wayne J., 1986. Informal hiring and income in the labor market. American Sociological Review 51, 574–582.

Brass, Daniel J., 1985. Men's and women's networks: a study of interaction patterns and influence in an organization. The Academy of Management Journal 28, 327–343.

Breen, Richard, 1996. Regression Models: Censored, Sample-Selected, or Truncated Data. Sage, Thousand Oaks, CA.

Browne, Irene, Tigges, LeanneJulie Press, 2001. Inequality through labor markets, firms, and families: the intersection of gender and race–ethnicity across three cities. In: Alice O'Connor, Chris Tilly, Larry, Bobo (Eds.), Urban Inequality: Evidence from Four Cities. The Russell Sage Foundation, New York.

Catanzarite, Lisa, 1998. Immigrant latino representation and earnings penalties in occupations. Research in Social Stratification and Mobility 16, 147–179.

Catanzarite, Lisa, 2000. Brown-collar jobs: occupational segregation and earnings of recent-immigrant latino workers. Sociological Perspectives 43, 45–75.

Catanzarite, Lisa, Aguilera, Michael B., 2002. Working with co-ethnics: earnings penalties for Latino immigrants at Latino jobsites. Social Problems 49, 101–127.

Coleman, James S., 1990. Foundations of Social Theory. The Belknap Press of Harvard University Press, Cambridge, MA.

Coverdill, James, 1998. Personal contacts and post-hire job outcomes: theoretical and empirical notes on the significance of matching methods. Research in Social Stratification and Mobility 16, 247–269.

Elliott, James R., 1999. Social isolation and labor market insulation: network and neighborhood effects on less-educated urban workers. The Sociological Quarterly 40, 199–216.

Elliott, James R., Sims, Mario, 2001. Ghettos and barrios: the impact of neighborhood ethnicity and poverty on job matching among blacks and Latinos. Social Problems 48, 341–361.

England, Paula, Christopher, Karen, Reid, Lori R., 1999. Gender, race, ethnicity, and wages. In: Browne, Irene (Ed.), Latinas and African American Women at Work. Russell Sage, NY, pp. 139–181.

Erickson, Bonnie H., 2001. Good networks and good jobs: the value of social capital to employers and employees. In: Cook, Susan, Lin, Nan, Burt, Ronald (Eds.), Social Capital: Theory and Research. Aldine De Gruyter, New York, pp. 127–158.

Falcón, Luis M., 1995. Social networks and employment for Latinos, blacks, and whites. New England Journal of Public Policy 11, 17–28.

Falcón, Luis M., Melendez, Edwin, 2001. The social context of job searching for racial groups in urban centers. In: Alice O'Connor, Chris Tilly, Lawrence, Bobo (Eds.), Urban Inequality: Evidence from Four Cities. Russell Sage, New York, pp. 341–371.

Fernandez, Roberto M., Weinberg, Nancy, 1997. Sifting and sorting: personal contacts and hiring in a retail bank. American Sociological Review 62, 883–902.

Fernandez, Roberto M., Castilla, Emilio, Moore, Paul, 2000. Social capital at work: networks and employment at a phone center. American Journal of Sociology 105, 1288–1356.

Fernandez, Roberto M., Fernandez-Mateo, Isabel, 2006. Networks, race and hiring. American Sociological Review 71, 42–71.

Granovetter, Mark, 1995. Getting a Job: A Study of Contacts and Careers, second ed. University of Chicago Press, Chicago.

Green, Gary P., Tigges, Leann M., Irenee, Browne Diaz, 1995. Social resources, job search, and poverty in Atlanta. In: Dan, Chekki (Ed.), Research in Community Sociology 5. JAI Press, Greenwich, CT, pp. 161–182.

Green, Gary P., Tigges, Leann M., Diaz, Daniel, 1999. Racial and ethnic differences in job-search strategies in Atlanta, Boston, and Los Angeles. Social Science Quarterly 80, 263–278.

Holzer, Harry, Joleen Kirschenman, Philip Moss, and Chris Tilly. 2000. Multi-City Study Of Urban Inequality, 1992–1994: [Atlanta, Boston, Detroit, and Los Angeles] [telephone survey data] [computer file]. Second ICPSR version. Atlanta, GA: Mathematica/Boston, MA: University of Massachusetts, Survey

Research Laboratory/Ann Arbor, MI: University of Michigan, Detroit Area Study and Institute for Social Research, Survey Research Center/Los Angeles, CA: University of California, Survey Research Program [producers], 1998. Inter-University Consortium for Political and Social Research [distributor].
Ipe, Minu, 2003. Knowledge sharing in organizations: a conceptual framework. Human Resource Development Review 2, 337–395.
Kanter, Rosabeth Moss, 1977. Men and Women of the Corporation. Basic Books, New York, NY.
Kilduff, Martin, Krackhardt, David, 1994. Bringing the individual back in: a structural analysis of the internal market for reputation in organizations. American Sociological Review 43, 285–301.
Kluegal, James R., 1978. The causes and cost of racial exclusion from job authority. American Sociological Review 43, 285–301.
Kmec, Julie A., 2003. Minority job concentration and wages. Social Problems 50, 38–59.
Kmec, Julie A., 2007. Ties that bind? Race and networks in job turnover. Social Problems, 54, 483–503.
Korenman, Sanders, Turner, Susan C., 1996. Employment contacts and minority-white wage differences. Industrial Relations 35, 106–122.
Lin, Nan, Ensel, Walter M., Vaughn, John C., 1981. Social resources and strength of ties: structural factors in occupational status attainment. American Sociological Review 46, 393–405.
Lin, Nan, 1999. Social networks and status attainment. Annual Review of Sociology 25, 467–487.
McGuire, Gail M., 2002. Gender, race, and the shadow structure: a study of informal networks and inequality in a work organization. Gender & Society 16, 303–322.
McPherson, Miller, Smith-Lovin, Lynn, Cook, James M., 2001. Birds of a feather: homphily in social networks. Annual Review of Sociology 27, 415–444.
Mier, Robert, Golith, Robert, 1985. Hispanic employment opportunities: a case of internal labor markets and weak-tied social networks. Social Science Quarterly 66, 296–309.
Mouw, Ted, 2003. Social capital and finding a job: do contacts matter? American Sociological Review 68, 868–898.
Mueller, Charles W., Parcel, Toby, 1986. Ascription, dimensions of authority and earnings: the case of supervisors. Research in Social Stratification and Mobility, 199–222.
Neckerman, Kathryn M., Fernandez, Roberto F., 2003. Keeping a job: network hiring and turnover in a retail bank. Research in the Sociology of Organizations 20, 299–318.
Newman, Katherine, 1999. No Shame in My Game: The Working Poor in the Inner-City. Knopf and Russell Sage, New York.
O*NET 3.1 Database [database]. U.S. Department of Labor, National O*NET Consortium. Available at: http://www.onetcenter.org/database.html.
Walter, Powell, Smith-Doerr, Laurel, 1994. Networks in economic life. In: Smelser, Neil, Swedberg, Richard (Eds.), Handbook of Economic Sociology. Princeton University Press, Princeton, NJ, pp. 379–402.
Reskin, Barbara F., McBrier, Debra B., Kmec, Julie A., 1999. The determinants and consequences of the sex and race composition of organizations. Annual Review of Sociology 25, 335–361.
Reynolds, Jeremy, 2006. Teams, teams, everywhere? The use of work teams within U.S. establishments. Social Science Research 35 (1), 252–278.
Royster, Deidre, 2003. Race and the Invisible Hand: How White Networks Exclude Black Men from Blue Collar Jobs. University of California Press, Berkeley.
Seidel, Marc-David L., Polzer, Jeffrey T., Stewart, Katherine J., 2000. Friends in high places: the effects of social networks on discrimination in salary negotiations. Administrative Science Quarterly 45, 1–24.
Smith, Ryan A., 2002. Race, gender, and authority in the workplace. theory and research. Annual Review of Sociology 28, 509–542.
Smith, Sandra S., 2000. Mobilizing social resources: race, ethnic, and gender differences in social capital and persisting wage inequalities. The Sociological Quarterly 41, 509–537.
Smith, Sandra S., 2008. Lone Pursuit: Distrust and Defensive Individualism Among the Black Poor. Russell Sage, NY.
Smith, Sandra S., 2005. Don't put my name on it: social capital activation and job-finding assistance among the back urban poor. American Journal of Sociology 111, 1–57.
Vallas, Steven P., 2003. Rediscovering the color line within work organizations. Work and Occupations 30, 379–400.
Wilmoth, Janet, Gregor, Koso, 2002. Does martial history matter? Marital status and wealth outcomes among preretirement adults. Journal of Marriage and Family 64, 254–268.
Winship, Christopher, Radbill, Larry, 1994. Sampling weights and regression analysis. Sociological Methods and Research 23, 230–257.