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The association between ethnic congruence in the supervisor–subordinate dyad and subordinate organizational position and salary

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Abstract

We used a large field sample (N = 32,854) to test popular press claims and propositions from relational demography theory that the ethnic congruence of the supervisor–subordinate dyad is associated with positive employee outcomes. Results indicate that ethnic congruence was positively associated with subordinates' level in the organization and salary. These relationships were moderated by type of compensation system, such that the effects were stronger in merit-based than in tenure-based systems. In addition, the extent of the relationship between supervisor–subordinate congruence differed by ethnic group, supporting previous research that suggests examining unique outcomes by ethnicity. However, although statistically significant, effect sizes were generally smaller than anticipated and implied in the popular press. Practical implications of these findings are discussed.

The popular press has put forth a consistent argument for the value of ethnic diversity in organizations (Fernandez, 1995; Martinez, 1995; Varian, 2005). Various researchers (e.g. McLeod & Lobel, 1996; Richard, 2000; Watson & Kumar, 1993) have sought to validate these assumptions, while others have prescribed models to leverage diversity beneficial to organizations and individuals (Cox, 1991; Cox, Lobel & McLeod, 1991). Although "diversity" may be used to refer to a multitude of individual and organizational characteristics, we are concerned here primarily with ethnic diversity or the racial complexity of an organization. Diversity research in organizations has proposed that working with a same ethnicity supervisor will provide professional and personal support and motivation, bolstering a minority employee's level of efficacy and success within an organization while at the same time reducing potentially negative or neutral mixed-ethnicity-only situations (Avery, 2003; Tsui & O'Reilly, 1989).

Contrarily, diversity research has also proposed the disadvantage of incongruence of ethnicity in the supervisor–subordinate dyad where minority employees have reported less access to career-enhancing networks (Ibarra, 1995) and overall less satisfaction (Greenhaus, Parasuraman, & Wormley, 1990). For instance, examining ethnic incongruence, Jeanquart-Barone (1993, 1996) argued that Black employees with White supervisors report less supervisor support and fewer developmental opportunities, leading to potentially lower employee level attainment within an organization. However, the majority of studies conducted to investigate the potential value of diversity and supervisor–subordinate ethnic congruence have focused primarily on attitudinal and perceptual outcomes, with performance being one of the few behavioral outcomes occasionally incorporated (Ibarra, 1995; James, 2000; Jeanquart-Barone, 1993, 1996; Kraiger & Ford, 1985; McLeod & Lobel, 1996; Perkins & Thomas, 2000; Pulakos, White, Oppler, & Borman, 1989; Richard, 2000; Tsui & O'Reilly, 1989; Watson & Kumar, 1993). Although extent research in organizational behavior has shown employee attitudes towards supervisors and the organization as a whole may be meaningful, from the employee perspective more objective and practical outcomes are likely to also to be of interest. However, there has been a lack of actual results showing specifically that the assumed impact on promotion and salary is a reality. While beliefs regarding these phenomena are no doubt important and influential in many ways, it is vital to understand the *actual impact* on organizational outcomes if we are to fully grasp the importance of congruent ethnicity supervisor–subordinate relationships within organizations. Addressing these issues will begin to shed light on questions such as whether organizations may need to re-evaluate their performance management and promotion systems in a diverse environment or, less drastically, make an effort to manage the impressions and beliefs that employees hold regarding the potential for advancement. Therefore, the purpose of the present study was to examine whether supervisor–subordinate ethnic congruence is in fact associated with practically important subordinate outcomes such as salary and existing level within the organization, as well as the magnitude of these relationships. In addition, to better understand these potential relationships, we examine the extent to which the relationships differ across both compensations systems and specific ethnicity.

In this study, we consider the supervisor as the immediate manager rather than any manager hierarchically above the employee in terms of organizational level. A previous study examining rater bias by Pulakos and colleagues (1989) using nearly 20-year-old data partially addressed this question in an analysis of Army participant performance ratings. Specifically, they examined the effects of rater and ratee race on subjective performance ratings of first-term Army enlisted personnel. Using both cross-sectional and repeated measures analyses, they found that ratees were rated slightly higher by raters in same-race dyads and noted "the overwhelming finding was that irrespective of whether between-subjects or repeated measures were used, the proportions of rating variance accounted for by race and gender were extremely small." We extend this research in the current study by (1) conducting these analyses with more recent data; (2) conducting in the private sector; (3) specifically focusing on practical and objectively measured outcomes of salary and level; and (4) using a structural moderator in the form of the organizational compensation system.

Theory and hypotheses

The primary proposition underlying the literature applicable to this study is that there are benefits for those employees who are ethnically similar to their supervisor. Two theo-

retical frameworks have primarily been used to explain this relational demography effect; the similarity-attraction paradigm and social identity theory. The similarity-attraction paradigm first proposed by Byrne (1971) argues that the extent to which an individual perceives another individual to be similar to themselves, they will be seen as more attractive. Although this judgment may fluctuate over time, it influences the level of attraction between individuals. Avery (2003, p. 672) used this framework to describe his findings when he argued "High perceptions of (ethnic) similarity tend to elicit favorable responses such as interpersonal attraction, perceptions of procedural fairness, and increased job satisfaction."

Extending the similarity-attraction paradigm into a more explanatory framework, Tsui, Egan, and O'Reilly (1992, p. 551) argue "The similarity-attraction hypothesis assumes interaction among individuals. Although interpersonal interaction is thus a necessary condition for social integration to occur, individuals can express preferences for a group even without social interaction." They conclude that "the similarity-attraction paradigm may not account for all the reported demographic effects, especially when actual interaction among the participants is unlikely." Based on these suggestions, social identity theory (Tajfel, 1982) and more specifically self-categorization theory (Turner, 1982) have been proposed as a potentially more comprehensive explanatory framework.

According to self-categorization theory, people classify themselves on the basis of surface-level diversity (e.g. demographic attributes such as ethnicity and gender) to form "in-groups" and "out-groups." In other words, "people use demographic differences, particularly those that are visible, to categorize one another" (Chapman & Spataro, 2005, p. 322). Brewer and Lui (1989) note an exceptionally strong tendency to classify based on visible characteristics beyond other potentially assumed characteristics, given that visible characteristics are considered to be more known than those characteristics that must be assumed (e.g. moral character). Furthermore, people subsequently bias in favor of similar in-group members and bias against out-group members (Hewstone, Rubin, & Willis, 2002). This effect is increased as individuals denigrate out-group members and perceive them to be less trustworthy, honest, cooperative, and effective than in-group members. These assertions were supported by Tajfel (1982) who conducted 30 field studies validating out-group and in-group biases. Therefore, as applied to a manager–subordinate dyad within an organizational setting, social identity theory would suggest that the extent to which the manager perceives the employee, based on visible characteristics, to be more like himself/herself, the employee is more likely to be classified as an "in-group" member (receiving the accompanying positive bias) and less likely to be an "out-group" member (receiving the accompanying denigrating bias). Given that managers are often in positions to determine employee salary and level, this positive or denigrating bias is likely to influence these outcomes. This is discussed below specifically in the context of ethnic congruence or incongruence in the dyad.

Effects of ethnic congruence

Research using self-categorization theory and focusing on ethnic congruence in the supervisor–subordinate dyadic relationship has also been analyzed considering social networks, job attitudes, and subjective performance outcomes and found support for the general relational demography hypotheses. For example, Ibarra (1995) demonstrated

that minority employees had fewer intimate social networks in the organizational setting and perceived less access to career benefits from those networks. This phenomenon is consistent with self-categorization theory, whereas individuals who are members of a supervisor's "in-group" are likely to experience more social interaction with the supervisor, thus potentially leading to expanded social networks in the organization. It is important to note that both Ibarra (1995) and Jeanquart-Barone (1993, 1996) demonstrate a belief of minority employees of less developmental opportunities and less benefit from identical social networks than non-minority counterparts. This belief is further enhanced for minority employees experiencing no ethnic congruence in their supervisor–subordinate dyads, as when minority employees see representation of their ethnicity at all levels of the organization they tend to perceive both more opportunities to advance (Kanter, 1977) and improved promotion rates (Konrad & Pfeffer, 1991; James, 2000). Considered in a self-categorization theory framework, these results may generalize to White employees with minority supervisors. Self-categorization does not explicitly account for ethnic majority versus minority effects but rather argues that all individuals classify other individuals into more in-group or out-group status according to observable stimuli. Thus, according to self-categorization theory, a White subordinate with a minority supervisor is likely to experience these perceptions similar to a minority subordinate with a White supervisor.

A key question arises with regard to whether these beliefs and assumptions are supported by actual workplace behavior and not just the theories underlying them. Following from earlier discussion on self-categorization theory, this framework suggests that White supervisors are likely consciously or subconsciously demonstrating denigrating bias towards minority subordinates in favor of other in-group White subordinates. This positive bias for in-group members is likely to manifest in more positive performance evaluations, favorable work assignments, increased recognition, and an improved likelihood of "selling" an in-group subordinate during discussions of promotion or pay decisions. For example, a meta-analysis (Kraiger & Ford, 1985) found that ethnic congruence with the manager was associated with higher performance evaluations. As previously noted and consistent with Kraiger and Ford (1985) and Jeanquart-Barone (1993, 1996) found that ethnically different leader–follower dyads yielded lower trust and less supervisory support than same ethnicity dyads. In addition, Greenhaus *et al.* (1990) found that minority status in organizations (measured by Black and White) was negatively related to supervisor rating of promotability and positively related to early career plateau. They note that this can be attributed to "subgroup membership" and may include effects on salary increases, career advancement, and psychosocial support (p. 65). Finally, Pulakos and colleagues (1989) also found that demographic similarity was associated with more supporting relationships. If this positive bias for in-group members and denigration for out-group members is occurring, it should have significant implications for workplace outcomes of salary and organizational level specifically as a consequence of the supervisor–subordinate relationship.

Another aspect to consider is that the beliefs described above may act as somewhat of a self-fulfilling prophecy. Specifically, these beliefs may be powerful predictors of performance, as higher levels of personal efficacy have been associated with higher performance and effort (Bandura, 1997; Stajkovic & Luthans, 1998). Following from this line of research, minority employees who *do not* perceive an equal opportunity to advance (i.e. lower efficacy towards career advancement) may become less likely to continue to put

forth the effort required to warrant advancement, viewing the goal as unobtainable and not seeing a link between performance and outcomes for themselves. Such a situation may result in minority employees effectively bolstering any negatively biased attitudes on the part of White supervisors, and only serving to perpetuate the problem. Similar to the previous scenario, behavioral reactions to strongly held beliefs about ethnic congruence in organizations, if occurring, should have deleterious effects on the actual promotion and salary decisions that are made with regard to minority employees in non-congruent supervisor–subordinate relationships.

The preceding discussion and findings suggest that ethnic congruence in the supervisor–subordinate dyad results in positive outcomes such as more interaction between supervisor and subordinates, higher level of subordinate job efficacy, lower levels of absenteeism, higher levels of organizational commitment, and higher performance ratings. Building on to this research, it is generally expected that higher salary and level within the organization should follow. Thus, we present the following hypotheses:

H1: Employees with same ethnicity as their supervisors will have a higher level in the organization than employees with a supervisor of different ethnicity.

H2: Employees with same ethnicity as their supervisors will have higher salary than employees with a supervisor of different ethnicity.

Effects of context

After reviewing the multitude of studies regarding relational demography, Avery (2003) concluded that few moderators have systematically been considered in the relational demography research stream. Contextual moderators, whereby situational factors may influence the size and frequency of the effects of relational demography dimensions on employee outcomes, can be important in explaining what Sutton and Staw (1995) call "micro processes" that encompass true theory. As previous research has suggested, employee attitudes (e.g. job satisfaction) may be influenced by ethnic congruence with the supervisor (Avery, 2003). This phenomenon would likely generalize to employees in both merit- and tenure-based compensation systems. However, it is quite possible that the effects on organization outcomes such as level and salary may be suffocated specifically by a tenure-based compensation system. For example, exclusively tenure-based compensation systems are those that promote based on years of service with the company. When this system is practiced, supervisors have little or no direct effect on the promotion of subordinates (short of firing them). Likewise, when salary is exclusively determined by tenure, the effects of supervisor-rated performance are not influential in determining these outcomes. Exclusively seniority-based pay structures hinder growth based on motivation or performance. Thus, the effects of ethnic congruence with one's direct supervisor are less relevant for level and salary outcomes. Further, in a pure tenure-based system, where years of service is the only influential variable for level and salary, one would expect no relationship between ethnic congruence in the supervisor–subordinate dyad and employee outcomes of salary and level.

Contrarily, effects of congruence of ethnicity in supervisor–subordinate dyads are anticipated to be more salient in a merit pay system where supervisors may have more autonomy for direct control over the subordinates' level and salary. Considering Tsui and O'Reilly's (1989) findings that supervisors prefer subordinates who are more demographically similar, subordinates who are ethnically similar to their supervisors may be more

appropriate to receive training and mentoring, higher performance ratings, or increased access to other opportunities. In a merit pay context, supervisors have certain levels of direct control over the salary and level of their immediate subordinates in the form of recommendations for promotion and determining wage increase. In these environments, it is expected that outcomes related to ethnic congruence such as social interaction, developmental opportunities, and likeability and mentoring would be less constrained than in tenure-based systems. Therefore, the relationship between ethnic congruence and employee outcomes is likely to be strengthened in a merit-based system. Thus, building on Hypotheses 1 and 2 that ethnic congruence in a supervisor–subordinate dyad will relate to level and salary, we also argue that in a merit-based system these effects will be even more pronounced.

H3: The type of pay system will moderate the relation between ethnic congruence and organizational level such that employees with same ethnicity supervisors will have higher level in the organization under merit pay system, but not under tenure pay system.

H4: The type of pay system will moderate the relation between ethnic congruence and salary such that employees with same ethnicity supervisors will have higher salary under merit pay system, but not under tenure pay system.

Method

Sample

The sample for our study comprised 2,699 supervisors and 32,854 of their subordinates in a large Fortune 100 multi-divisional corporation specializing in the aerospace industry. This sample represented two divisions from the total organization and was located in the same geographical area (e.g. comprised all employees of one site). In addition, this sample represented approximately 23.4% of the total organization (N = 140,000). Although the majority of the sample was White (82%), there were 6,082 minority employees (10% Asian, 4% Black, 3% Hispanic, <1% American Indian).[1] The percentages of minorities were relatively small in comparison with the majority, but the percentages found in this sample likely reflect reality in many large organizations, and set the stage for conservative statistical findings. This sample also allowed for a test of congruence effects for over 6,000 minority employees. The average age was 47 years with an average tenure of 17 years (SD=8.3). For this sample, 63.2% of the employees were in a merit-based compensation system and 36.8% were in a tenure-based compensation system.

Implicit in our hypothesis testing was that employees have been with their current supervisor over a substantial period of time in order for the effects of supervisor–subordinate congruence/incongruence to take place. Internal organizational structures supported this assumption as entry-level employees may be promoted five times (level 1 to level 6) before transitioning into management and thus, changing their supervisor. However, the cross-sectional nature of the data for this sample required that we take additional steps to help substantiate this important longitudinal assumption. Therefore, we obtained archival

[1] Due to statistical complications associated with the small number of American Indians, in this sample, we excluded this segment of the population from further analysis. Note that results did not differ when these individuals were included in the analyses.

employee records for a subset of 807 engineers and technicians from the merit-based compensation system. Of this group, 89.47% of employees had remained with their current supervisor for at least 5 years. Given the annual opportunity for supervisors to provide salary and level adjustments in this system, we concluded that 5 years was a conservative length of time for this analysis such that supervisors had no less than five opportunities to make such adjustments. Although recognizably imperfect, these findings helped substantiate the underlying assumption regarding the temporal nature of supervisor–subordinate relations and study outcomes.

Measures

For this study, ethnicity was based on information that employees provided to the company, as indicated in company records. Self-reports of demographic information, such as ethnicity, are generally considered to be reliable and valid (Kerlinger & Lee, 1999). Congruence of ethnicity in the supervisor–subordinate dyadic relationship was determined by congruence of ethnicity between the subordinate and their direct supervisor. In total, 81% of the subordinates had the same ethnicity as their supervisor with 19% having incongruence of ethnicity with their supervisor.

Outcome variables were also provided by the company as part of official company records and are generally considered to be objective, reliable, and valid measures. *Organizational level* was represented by the level of the employee from entry (level 1) to executive vice president (level 14).[2] *Salary* was measured as the yearly salary on record with the organization. For those employees receiving an hourly rate, we calculated their annual salary by multiplying the hourly rate with 2,080 hours in a standard work year (40-hour weeks, 52 weeks).

Compensation system (merit vs. tenure) information was provided by company records. The manufacturing division used an exclusively tenure-based system for promotion and salary determination, whereas other divisions (i.e. finance, marketing, supplier management and procurement, and engineering) are on a merit-based system where the first-level supervisor had immediate influence over salary (through performance evaluations that lead to the level of increase) and promotion (through recommendations to larger management teams for promotion).

Control variables

The city in which each participant worked was included as a covariate in all analyses. Although we could not control for cost of living directly, it is likely to be highly related to the city where the respective employees worked. This covariate also controls for other differences between physical plant locations. In addition to controlling for city of employment, we used the work unit in which the employee was working as a covariate in all analyses. The work unit variable comprises sub-divisions within the larger division. For example, one division in this study is engineering. A work unit within that division would be the product line those engineers designed (e.g. product X). Using this variable as a covariate controls for differences between work units which are more detailed than overall division but not as detailed as individual work group. Specifically, work units may have different salary means, salary reference tables, criteria for promotion, and different norms

[2] Corporate officers were not included in this study.

in terms of rate of promotion. Thus, to control for a particular work unit or group of work units influencing results, work unit was used as a covariate. In addition, given that previous research has found main effects of ethnicity on individual outcomes in organizations (Tsui & O'Reilly, 1989), race of subordinates and race of supervisors were also used as covariates in hypothesis tests.

Results

Hypotheses 1 and 2 suggested that employees with same ethnicity supervisors would attain a higher level in the organization and a higher salary than those with supervisors of a different ethnicity. These hypotheses were tested via MANCOVA ($F(2, 35{,}142) = 16.41$, $p < .001$). As seen in Table 1, ethnic congruence significantly predicted salary ($F(1, 35{,}143) = 31.14$, $p < .001$), but not level ($F(1, 35{,}143) = 3.43$, $p > .05$), thereby only providing support for Hypothesis 2.

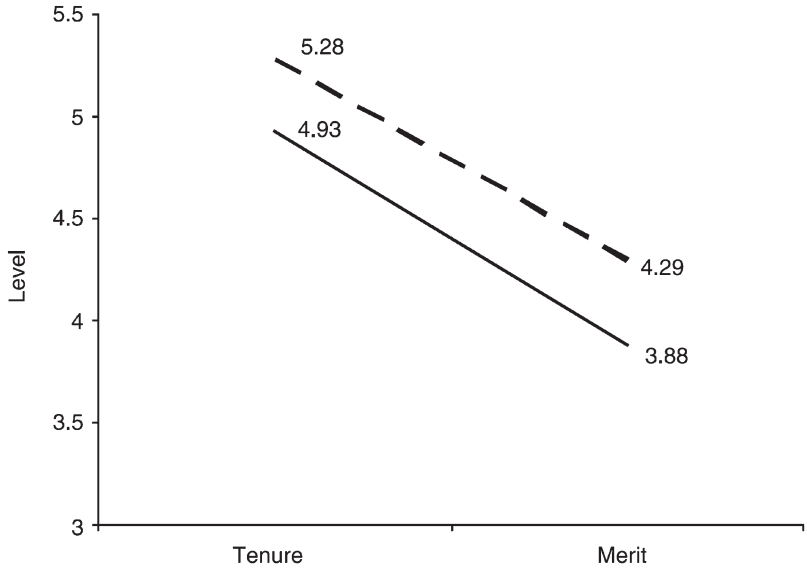
Hypotheses 3 and 4 suggested that employees with same ethnicity supervisor would have attained a higher level in the organization and a higher salary than those a different ethnicity supervisor under a merit-based pay system, but not under a tenure-based pay system. Although the overall effect of ethnic congruence and type of pay system was significant $F(2, 35{,}140) = 35.22$, $p < .001$, follow-up univariate tests provided mixed support for these hypotheses (see Figure 1). More specifically, whereas pay type and ethnic congruence interacted to predict organizational level $F(1, 33{,}560) = 27.98$, $p < .001$, $\eta^2 = .001$, they did not significantly interact to predict salary $F(1, 33{,}560) = 0.76$, $p > .05$. Thus, findings provided support for Hypothesis 3 and did not support Hypothesis 4 (Table 2).

Supplemental analysis

Culture has often been used as a moderator in organizational behavior research, as cultural backgrounds, experiences, and other differences may predispose people to perceive and react differently to similar stimuli (Dorfman & Howell, 1997). In addition, management research has occasionally considered by-ethnicity differences in organizations and found meaningful differences based on perceptual differences among ethnic groups. For example, some empirical works conclude that racial cues are less salient for White versus Black employees (Davis & Burnstein, 1981; Thomas & Wise, 1999; Perkins & Thomas, 2000). Thomas and Wise found that among potential job applicants, minorities placed significantly more value on diversity factors within the organization and recruiter characteristics than did majority group members. Thus, ethnicity may differentially affect em-

Table 1. Main and covariate effects on salary and level

	Salary			Level		
	F	*p*	η^2	*F*	*p*	η^2
City	2,515.08	.001	.067	196.46	.001	.014
Work unit	89.63	.001	.003	144.16	.001	.004
Subordinate ethnicity	0.45	.50	.000	73.81	.001	.002
Supervisor ethnicity	14.47	.001	.001	2.67	.10	.000
Ethnic congruence	31.14	.001	.001	3.43	.06	.001



Note. Dashed line represents congruent ethnicity between supervisor and subordinate, solid line represents racial incongruence.

Figure 1. Level by congruence and pay type.

ployee reactions to the same event, specifically in terms of issues of ethnicity and diversity within an organization.

In addition to employee perceptions, previous research has argued that managerial perceptions of ethnicities may differ. For instance, it has been suggested that Asian employees (as a group) tend to be viewed as diligent, agreeable, flexible, modest, polite, soft-spoken etc. (Hung, 1995). This type of impression may serve to lessen the effects of out-group denigration discussed earlier. Alternatively, Xin (1997) provided evidence that the impression-management tactics preferred by many Asians go unnoticed by Whites and may lead to converse effects than those suggested by Hung (1995). Thus, there may be meaningful differences in managerial perceptions of employees by ethnic group.

Given the potential importance of examining by-ethnicity effects on relations between variables, we conducted exploratory supplemental analyses to investigate any by-ethnicity differences. These analyses examined whether ethnic congruence related to outcome variables differently between ethnic groups. We first ran an omnibus MANCOVA testing the three-way interaction between ethnic congruence, type of pay, and employee's race. Results supported the three-way interaction $F(6, 35{,}131) = 5.73$, $p < .001$, suggesting that

Table 2. Conditional means of level and salary by ethnic congruence of supervisor and subordinate

	Salary	Level
Congruent	$69,301	4.64
Incongruent	$66,013	4.50

Models and conditional means were adjusted for covariates; city $B = 0.54$, $p < .001$, work unit $B = 0.58$, $p < .001$, subordinate ethnicity $B = 4.59$, $p < .001$, and supervisor ethnicity $B = 4.91$, $p < .001$.

Table 3. Conditional means of level by ethnic congruence of subordinate and supervisor and by race

	Tenure				Merit			
	Asian	Black	Latino	White	Asian	Black	Latino	White
Congruent	3.50	4.92	3.68	5.78	3.52	6.84	5.24	4.14
Incongruent	4.47	5.22	5.39	5.36	3.43	3.49	3.45	4.36

Models and conditional means were adjusted for covariates; city $B = 0.54$, $p < .001$, work unit $B = 0.58$, $p < .001$, subordinate ethnicity $B = 4.59$, $p < .001$, and supervisor ethnicity $B = 4.91$, $p < .001$.

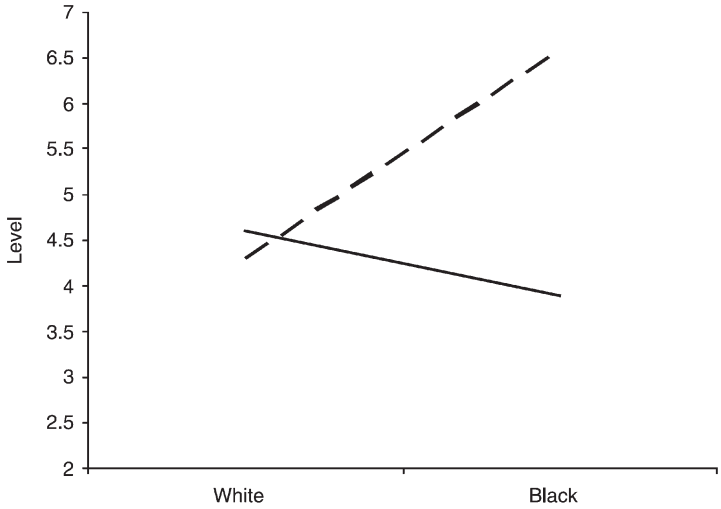
the joint effect of congruence by pay type also differed by race. These effects were significant for level $F(3, 35{,}131) = 8.15$, $p < .001$ but not salary $F(3, 35{,}131) = 0.55$, $p > .05$. Conditional means for level are reported in Table 3. The overall MANCOVA was significant $F(4, 19{,}816) = 5.94$, $p < .001$. Follow-up ANCOVA's with simple contrasts suggested that these effects were only significant between Blacks and Whites in a merit-based system for organization level $F(3, 19{,}817) = 5.21$, $p < .001$. The nature of this interaction is displayed in Figure 2 and suggests that this interaction is largely driven by the positive relation between ethnic congruence and job level for Black employees. Together, these findings suggest that relations between ethnic congruence and actual organizational outcomes are more complex than originally thought and differ by ethnicity.

Discussion

Assertions from popular press and relational demography literature (e.g. social identity theory) suggest that employees will benefit from reporting to a supervisor of the same ethnicity. Results from Hypotheses 1 and 2 suggest mixed support for these assertions. Specifically, findings suggest that employees may benefit from congruence of ethnicity with their supervisor in terms of having higher salaries, but not in terms of employee level within the organization. Analyses including the moderating effect of compensation system and specific ethnic group suggest that this phenomenon is more complex than has been considered in previous research, such that some relations were only significant under merit pay systems (e.g. Hypothesis 2). Furthermore, supplemental by-ethnicity analyses suggest that the positive impact of congruence (i.e. Hypotheses 1 & 2) may be more pronounced among employees from certain ethnicities.

Theoretical implications

In terms of main effects, we found partial empirical support for the premises underlying social identity theory, as findings suggested that when a subordinate and supervisor have the same ethnicity, subordinates generally benefit in terms of overall salary, but not in terms of level acquisition within the organization. From a "statistical significance" perspective, the nature of the results for employee salary were in line with commonly held popular press assumptions that diversity within management and the availability of similar ethnicity supervisors may have positive outcomes for minority employees in large organizations. However, the practical importance of the statistically significant findings must also be addressed before drawing inferences about the real-world impact of these findings.



Note. Dashed line represents congruent ethnicity between supervisor and subordinate, solid line represents racial incongruence.

Figure 2. Level by congruence and ethnicity.

Given that the effects were moderated by compensation system and mixed support was found depending on which ethnicity was under examination, the only conclusion that may be drawn is a non-definite; that it may or may not be better for employees to have the same ethnicity as their supervisor. While these results are perhaps not aesthetically pleasing, they are nonetheless important. Our overall results suggest that the broad-stroke notion that supervisor–subordinate ethnic congruence has positive impact on outcomes (e.g. level, salary) may be overstated. However, these purported effects may be more salient for particular ethnic groups that have traditionally been a target of discrimination in the United States (the location of the organization from which our sample was taken). Our results can therefore not fully reject or substantiate the relational demography hypothesis.

One contextual factor that moderated the impact of having a same ethnicity supervisor was the structure of the pay system within the organization. For individuals operating within a tenure-based system, having a same versus different ethnicity of supervisor had little relation with salary or level. Rather the effects of congruent ethnicity were more pronounced when the pay system was merit based. Merit systems allow for individual motivation and performance to dictate more completely how one advances within an organization, and further provide supervisors with more direct influence on subordinates level and salary via performance appraisals. However, we did find that supervisor–subordinate ethnic congruence related to employee level only when in a merit-based pay system. This suggests that promotion opportunities may be influenced by "out-group" denigration via performance evaluations or supervisor recommendations but only when promotion is not primarily based on length of service in the organization. This also suggests that the lack of main effects regarding employee level in hypothesis 1 is misleading unless pay type is also taken into account. These findings underscore the importance of contextual factors when considering diversity between supervisors and subordinates.

A second contextual factor found to significantly influence the impact of congruence in supervisor–subordinate ethnicity was the specific ethnicity of the dyad. Because these analyses were supplemental and exploratory in nature some rationale for these effects are discussed below, but should be interpreted with caution. These findings are consistent with arguments from relational demography, which suggest stronger effects for minority than for majority employees. For example, Avery (2003) found that minorities responded more favorably with advertisements from organizations when they included minority employees. However, this effect was negligible when the same advertisements containing White employees were posed to White participants. Similarly, we found that the effects of ethnic congruence were more pronounced for African American than for White employees. Specifically, the positive relationship between congruence and level was significantly more positive for African Americans than Whites, suggesting that this racial group stands to benefit most from congruent ethnicity of supervisor–subordinate relationships. These findings offer some support for notions presented in popular press outlets and theorized in this study based on self-categorization theory. It should not be surprising that the largest effects were found for African American employees, as this ethnic group has faced perhaps more targeted and blatant ethnic-based discrimination in history of the United States than other groups. Considering the history of race- and ethnic-based perspectives within the U.S. and a tendency to propagate such categorization (see Caspari, 2003 for a review of ethnicity from an anthropological perspective), it should not be hard to imagine why African Americans may feel more comfortable in a congruent supervisor situation. Whether it is a function of receiving more opportunities, equitable performance evaluations, or simply feeling confident that advancement is obtainable and thus being motivated to put in the effort to succeed, these congruent situations appear to offer at least a statistically significant benefit to African Americans.

The reason for the lack of significant findings for Hispanic employees is not readily obvious. Past studies have suggested that Hispanic employees may tend to react similarly to Black employees with regard to ethnic/racial issues at work (e.g. Cox, Lobel & McLeod 1991). It could be the case that in this particular company there has been somewhat less of a history of discrimination against Hispanic employees, thus reducing the salience of supervisor–subordinate ethnic congruence. As the analyses regarding specific ethnic groups were exploratory in nature this is only speculative at this point. This study does however highlight the potential for unique results for different ethnicities versus simply combining all minority groups into a "non-White" category. While the relationships between Black and White employees have been frequently compared in the management literature (Davis & Burnstein, 1981; Mehra & Kilduff, 1998; Thomas & Wise, 1999), other ethnicities have not been systematically analyzed. Future research may consider potential integrations with sociology and anthropology literatures in order to better understand specific within-ethnicity consistencies and between-ethnicity differences. In addition, based on our results (i.e. where the strongest relationships included black employees), it is likely not appropriate to dichotomize ethnicity in such broad categories as "majority" and "minority" as patterns of results emerged that were quite different among ethnic groups. In conclusion, there are several opportunities to advance the study of by-ethnicity effects in management research and perhaps the time is now for management researchers to consider stopping the use of ethnicity simply as a covariate in analyses and investigate it thoroughly as a meaningful variable with meaningful between-group differences. Finally, it should be noted again that these results were exploratory and the generalizability of these effects ought to be determined through replication and convergence to lend serious credence to the implications.

Practical implications

The statistical results of this study provide some support for assumptions of popular press and researchers who support the notion that diversity, specifically that supervisor–subordinate ethnic congruence, may be related to important employee outcomes. However, looking more closely at the results of this study, a second story emerges as well. Despite finding statistically significant effects, which are admittedly influenced by the relatively large sample size, we question how meaningful these results would be to an employee's actual level in an organization. Tsui and O'Reilly (1989) and Tsui and colleagues (1992) also obtained significant but consistently small effect sizes using relational demography measures including ethnicity, in addition to gender and age. In terms of meaningful effect sizes, our findings suggest a less powerful effect than generally expected given popular press assumptions. Although supervisor–subordinate ethnic congruence may influence attitudes and perceptions of employees (aspects that may have impact on various employee behaviors and performance), the evidence for *meaningful* effects of congruent versus not congruent supervisor–subordinate ethnicity on the bottom line of employee level and salary is less than impressive in this particular study. While the effect sizes were generally quite small limiting meaning, it should be noted that even small effect sizes over many people (e.g. 30,000) may begin to be meaningful overall for diversity in organizations; if not necessarily for each individual.

This does not suggest that organizational diversity or representation of diversity at upper-levels of management is not important, or that it should be ignored. Cox (1991) and others (e.g. Robinson & Dechant, 1997) have argued for and demonstrated that diversity, including ethnic diversity, has strategic advantages for firms. Furthermore, there are a number of studies purporting the influence of racial representation and supervisor–subordinate congruence on minority employee attitudes, satisfaction, commitment, organizational citizenship behaviors, and turnover. It should also be noted that the mixed nature of our results, despite small effect sizes, suggest a more complicated story than that told by the press and some prior research, and serve as a call for more research to better understand the multiple and diverse effects of ethnic congruence in the workplace.

On the other side of the equation, the mixed results and small effect sizes also imply that incongruence may not be particularly harmful to minority employees, and that other factors such as matching of strengths, knowledge, skills, and abilities (Carless, 2005; Edwards, 1991; O'Reilly & Chatman, 1991) may have more impact on performance and subsequent promotion and salary levels. That ethnicity may be less of a factor with regard to level in organizations should be viewed as a positive result.

Limitations and future research

As with any scientific study, results should be examined with caution and within context. First, as with most field studies on relational demography or ethnicity, this is a cross-sectional design. A counter explanation to these results would be that highly paid and promoted employees have more choice over their supervisor and choose a supervisor of the same ethnicity. In addition, we were not able to obtain data that would allow us to ascertain the length of time which all employees had worked for the same supervisor, hence, the relation between ethnic congruence and outcomes are somewhat difficult to tease apart. This was compensated to some degree by an analysis of a subset of employees revealing approximately 90% of employees in the subset worked under the current supervisor for at least 5 years. An extension of this study would be a longitudinal design that would allow a better sense of directionality of the relationship found in this study.

Another limitation is that data represented a single organization, lending questionable external validity in that the dominant organizational culture and hiring processes were equal to all participants. Further, although work unit was used as a covariate, archival data did not allow for the statistical investigation of alterative explanations for differences that may have existed between specific teams within each work unit. Given that sub-cultures may exist within the organization that influences how policies and practices are implemented, future research is needed to examine department or sub-climate-level variables that may help explain or provide alternative explanations for these findings.

Future studies on these topics should continue to test the popularly held beliefs in this field in order to more accurately understand phenomena of interest to researchers, practitioners, and society in general, and to temper beliefs that may be less substantiated than commonly thought to be. Specifically, given the mixed support for the relational demography hypothesis for specific ethnicities, future research should continue by-ethnicity analyses in organizational research. Although beliefs about the benefits of ethnic diversity or, in this case, congruent supervisor-dyad relationships are not always a popular topic to challenge, it is important to fully understand such phenomena and the conditions under which they operate in order to provide the best advice to practitioners, as well as to better tailor organizational and academic efforts to ensure that the true benefits of a diverse workforce may emerge. Specific studies related to this investigation may include examining other characteristics that dictate successful versus unsuccessful supervisor-dyad relationships. Specifically, studies looking deeper than just ethnicity, at the underlying characteristics and qualities that define a successful relationship of individual dyads in order to better understand the nature of successful personnel placement and mentor–mentee selection, would be beneficial.

Conclusion

Our purpose in this study was to provide a practical test of one component of the relational demography literature. Statistically speaking, our findings offered mixed support to popular press and research claims that congruence of ethnicity in the supervisor–subordinate dyad has implications on the career success of employees. We did however find a positive effect of congruence on employee salary outcomes, which was influenced by both type of compensation system and specific ethnicity. In conclusion, the strategic advantages of diversity have been clearly defined in the academic and practical literature. This study has produced additional insight into the complex nature of ethnicity, management, career development, and organizational success.

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