What are the Benefits of Supervisor Support? Are they affected by an Employee’s Race?

THESIS

Presented in Partial Fulfillment of the Requirements for the Degree Master of Arts in the
Graduate School of The Ohio State University

By
Robert Ernesto Armendariz, B.A.
Graduate Program in Sociology

The Ohio State University
2012

Master’s Examination Committee:
Dr. Randy Hodson, Advisor
Dr. Vincent Roscigno
Dr. Andrew Martin
Copyrighted by

Robert E. Armendariz

2012
Abstract

While the supervisor-employee relationship is one of the most fundamental relationships at work, no study has examined the constellation of effects a supervisor may have on employees’ performance and well-being. Using the 1997 & 2002 Waves of the National Study of the Changing Workforce (NSCW), this study evaluates the effect of supervisor support on an employee’s job satisfaction, extra effort towards organizational goals, sense of solidarity at work, and perceived advancement opportunities. Moreover, this study assesses whether relationships are moderated by the employee’s race. My findings indicate that increasing supervisor support is positively associated with job satisfaction, sense of solidarity, and perceived advancement to a very similar degree. In contrast, supervisor support has a noticeably smaller effect on encouraging extra effort. Results also indicate that Black employees, compared to White employees, benefit more from increasing supervisor support in regard to feeling integrated at work. This is a notable outcome for employers concerned about preventing Black employees from feeling alienated in the workplace. Interestingly, the effects of supervisor support do not vary by race for the other three outcomes, a valuable source of information for organizations with notable amounts of racial diversity.
Acknowledgements

This thesis was only possible through the contributions and mentoring of three very special people. I am grateful to Dr. Andrew Martin for his excellent advice, being an outstanding math teacher, and teaching me the fundamentals of social statistics. The first steps are often the most difficult. Dr. Vincent Roscigno’s counseling at the major crossroads of this study, and advice on how to be a more professional writer were immensely helpful. I could not be a true scholar without him. His energy and enthusiasm towards students is the kind of working relationship all professionals need to strive for.

My advisor, Dr. Randy Hodson is the kind of teacher every student should have. He is a continuing inspiration as a researcher, teacher, and example on how to patiently you mentor people so they can reach their potential. Thank you so much. I conclude with deep gratitude and love to my parents, John and Estela, who are the reason why I have the opportunity to contribute to this fine university via my research.
Vita

June 2005…………………………………Archbishop Quigley Preparatory Seminary

May 2009…………………………………B.A. Sociology (dept. honors), Loyola University Chicago

May 2009…………………………………B.A. Anthropology, Loyola University Chicago

2010 to Present…………………………Graduate Teaching Assistant, Department of Sociology, The Ohio State University

Fields of Study

Major Field: Sociology
Table of Contents

Abstract .............................................................................................................. ii
Acknowledgements ......................................................................................... iii
Vita ................................................................................................................... iv
List of Tables ................................................................................................ iv
List of Figures ............................................................................................... vi
Introduction ...................................................................................................... 1
Literature Review ............................................................................................ 4
Theory .............................................................................................................. 9
Hypothesis ....................................................................................................... 15
Data .................................................................................................................. 17
Methods & Measures ..................................................................................... 19
Analytic Strategy ............................................................................................ 27
Results and Findings .................................................................................... 29
Conclusion ....................................................................................................... 36
References ....................................................................................................... 45
Appendix: Tables and Figures ....................................................................... 48
List of Tables

Table 1. Descriptive Statistics for Variables..............................................49
Table 2. Tabulation: Chances for Advancement........................................50
Table 3. Two-Sample t test with Equal Variances.....................................50
Table 4. Cross-Tabulation: Same Race as Supervisor?...............................50
Table 5. The Effect of Increasing Supervisor Support................................51
Table 6. Interaction: Increasing Supervisor Support and Race of Employee....53
List of Figures

Figure 1. Effect of Increasing Supervisor Support on Employees………………...54
Figure 2. Interaction Supervisor Support and Race on Solidarity at Work……….55
Figure 3. Items for Scale: Increasing Supervisor Support………………………..55
Introduction

The employee-supervisor dyad is one of the most visible, universal relationships in the world of work. An employee’s well-being encompasses many fundamental dimensions of employment, several of which can be significantly affected by an immediate authority figure. Additionally, work cultures are often very diverse environments. Aside from formal status differences (e.g. supervisor vs. employee) there are ascribed statuses such as race, gender, seniority, and immigrant status. These ascribed characteristics can and often do lead to different expectations and treatment towards employees, even if different groups of employees have roughly the same human capital and work in the same occupation.

This study addresses two questions relative to employee-supervisor relationships. First, I examine how much increasing supervisor support influences an employee’s job satisfaction, perceived advancement opportunities, sense of solidarity at work, and extra effort towards company success. Examining the supervisor-employee dyad links the outcomes from this relationship to broader impacts that employees have on an organization. For example, this dyad can affect how much employees are willing to go above and beyond for the organization’s goals. I measure the concept of a “supportive supervisor” based on nine survey questions (alpha .90) which enables a more thorough assessment of this common workplace relationship.
The second research question in this study seeks to determine whether a more supportive supervisor has a larger impact on Black and Latino employees, compared to White employees. Sociologists, organizational psychologists, and scholars in business note that Blacks and Latinos are often affected by assessment bias and tend to receive lower evaluations which affects their experiences at work on several levels (Avery 2008; Stainback et al. 2005; Dobbin et al. 2007). Still, what happens in those comparatively rare situations when Blacks and Latinos have a relationship with a supervisor who has realistic expectations and fairly assesses their performance? Perhaps supportive supervisors can cut across racial lines and facilitate notable positive responses from employees of color which is what businesses would want from their organizational leaders. Results may illustrate how important it is for businesses to invest in developing effective leaders who are able to handle competing demands, despite the fact that managing diversity issues and investing in organizational leadership are both costly, time intensive endeavors (Mckay & Avery 2005).

To address my two research questions, I examine survey data from the 1997 & 2002 National Study of the Changing Workforce (NSCW). Using repeated cross sectional data, multivariate regression analysis is conducted for American employees who have a supervisor (n=4,502). Although wages, industry, and other elements may affect an employee well-being, I predict that a supportive supervisor will have a substantial impact on the four outcomes considered: job satisfaction, extra effort towards organizational goals, solidarity at work, and perceived advancement opportunities. My hypothesis is based on Eder & Eisenberger’s (2008) theory of supervisors: an employee believes their relationship with their supervisor is representative of (1) how upper management values
the employee, and (2) the level of organizational support the company provides. Hence the relationship with one’s supervisor directly influences how employees gauge their chances of getting a promotion, and how much effort they put towards tasks.

Many scholars also note that minority employees are particularly sensitive to racial issues at work (Mason-Chrobat 2003; Geddes & Konrad 2003; Browne and Misra 2003) because they are often disproportionately subject to them. Yet, previous research has not examined supportive employee-supervisor relationships with a sample that includes a large number of minorities. I suggest that Black and Latino employees may internalize the positive effects of a supportive supervisor more so than their White counterparts because this type of relationship would be more uncommon and therefore be more valued, thereby translating into greater productivity and wellbeing. In what follows I provide an overview of the literature on determinants of employee’s well-being and performance, employee-supervisor relationships, and how an employee’s race impacts their experiences at work. Next, I discuss the data, methods, and variables that comprise this study. This study concludes with my findings from the OLS regression models, and an interpretation of my findings, including relevant interactions.
Literature Review

Sociology has a long history of examining the condition of workers, from Weber to renowned publications such as Hodson’s *Dignity at Work* (2001) who looks at how dignity at work is challenged on four fronts: via mismanagement & abuse, overwork, challenges to autonomy, and contradictions in employee involvement. Still, a great deal of the literature focuses on how dignity, wellbeing, and other factors are threatened by bureaucratic structures or oppressive bosses rather than how they are enhanced by effective work relationships.

Organizational culture is made up of several attributes which social scientists and labor analysts use to measure a workforce’s morale. Some components are employees feeling they are an integral part of the organization; a willingness to give extra, unpaid effort to achieve goals; and a sense of equal opportunity for promotion. Tolbert and Hall (2009) provide a strong summary why these elements are desirable for the organization as a whole. An effective work culture helps coordination, decreases excessive formalization for governing behavior, and helps ensure “which certain formal structures are accepted” (Tolbert & Hall 2009: 58).

*How valuable is a good supervisor?*

Having a supervisor or an immediate boss is an almost universal position in
modern organizations. Cultivating exceptional leadership among managers and supervisors is a recurring emphasis in business schools and professional circles. Still, defining what precisely makes a “good supervisor,” or an effective business leader in general, is difficult because of the many attributes that encompass their job. Supervisors need to satisfy task related attributes such as ensuring productivity and attendance, but also coordinate issues with their subordinates such as personal emergencies. Stainback et. al (2011) created a scale for supervisor support, using the same nine items in this study. The scale measures (1) task related attributes along with (2) how effective a supervisor resolves work-family conflict. Stainback and colleagues limited his analysis to perceived sex discrimination, showing that a supportive work environment (how he interpreted his scale) reduced perceived sex discrimination for men and women. I examine the effects a supervisor may have on multiple outcomes such as job satisfaction and extra effort.

Past work on supervisors and race

Past scholars have focused on supervisor-employee relations in very racialized industries. Often, scholars use one establishment to represent recurring patterns for an industry. For instance, Cranford’s (2005) work studies Latinos in the custodial industry. Race and immigrant status was the driving force behind the employee-supervisor relationship. Hispanic supervisors were well aware that Hispanic employees lack networks ties to more lucrative career. Hence supervisors overworked employees on a consistent basis, especially if the employee was an illegal immigrant since threatening to report employees is an effective retort to employee complaints. My study fills these gaps in the literature. My nationally representative sample yields findings that are
representative of workers with supervisors, and not just to a particular set of industries or occupations. This is valuable considering the effect of supervisor support on Blacks and Hispanics, controlling for one’s work environment, is currently unknown.

*Structural limitations faced by minorities*

In general, diversity is not given as much attention and resources as other employment issues. Mason-Chrobat (2003) notes that organizations usually spend less than 10% of their training budget towards implementing diversity. Most diversity training programs often last a day or less. Dobbin used EEOC data to show that employees of color often face a more resistant work culture because of ineffective diversity programs. The most popular programs often embody an individualist philosophy for explaining why discrimination occurs, resulting in very low percentages of minorities in management positions (Dobbin et al. 2011).

Roscigno, Hodson, and Lopez (2009) have used status differentials such as gender, job security, and race to examine the effects on the amount of bullying in supervisor-employee relationships. Women, racial minorities, and those with low job security are much more likely to experience significant bullying. Furthermore, supervisors who act as bullies are more common in very disorganized settings where the limits of one’s authority is ambiguous. Literature tells us how much status groups differ in their experiences toward negative outcomes, like bullying, but we do not know how much these status groups are influenced by a good boss. As Roscigno et al. point out (2009) the idea of one group being cut off from others was first mentioned in Weber’s concept of social closure where certain groups maintain their advantages by manipulating
the organization’s structure, thereby excluding other groups. On the other hand, and a major research question for this study, perhaps a supportive supervisor can greatly reduce the social closure among disadvantaged or minority groups.

Social closure is such an important concept in sociology because it affects many statuses, race being a prime example, and has a dramatic effect on certain members within an organization. Jeanquart Barone (1996) and George Wilson (1997 & 1999) noted that Black employees received harsher evaluations, less procedural justice, and less supervisor support from white supervisors compared to white employees, even when they had similar qualifications. This translates into much narrower resources and qualifications to reference upon when applying to top positions. A professional occupation does not eliminate racial disparities either, as demonstrated in qualitative studies on Black HR employees (Barnett et. al 2003) and Hispanic professionals (Calcago-Rodriguez & Brewer 2005). Minority employees tend to receive less engaging tasks and are more likely to be ignored during meetings. A poor relationship with a supervisor can have serious impacts on minorities because they often interpret the relationship as a violation of a “diversity contract.” Since it has become ubiquitous for organizations to claim they “value diversity,” unfavorable racial disparities can lead to higher levels of job stress, organizational cynicism, and psychological withdrawal. This is especially true in professional work which requires a high amount of educational and/or vocational training (Calcago-Rodriguez & Brewer 2005; Mason-Chrobat 2003).

Social networks and lowered expectations

An individual’s social network is often characterized by racial homophily.
Members within same race networks also tend to have similar socioeconomic status, and tend to face similar barriers at their respective jobs. Scholars have highlighted minorities’ awareness that diversity talks are often window dressing, and that racial discrimination by supervisors is a widely known social problem (Mckay and Avery 2005; Linnehan et al 2006; Elvira and Town 2001). The result is minorities may frequently learn about bad supervisor-employee relationships, ones that are rooted in race, through their social networks. Hence, this may be another reason why minority employees might be especially affected by a supportive supervisor. The information gleamed from a minority’s social networks about the frequency of racial discrimination and evaluation bias may lead to lower expectations about their supervisor (and employer) since they are based on the shared experiences of same-race friends, family, and coworkers.

Yet, when minorities have a supportive supervisor, it may breach these lowered expectations and cultivate an especially positive reaction. In fact when organizational leaders see themselves as a representative of minority interests (“representative bureaucracy”), they often has a strong effect on creating policies addressing said interests (Coleman, Brudney, and Kellough 1998). Hence, the relationship between effective leaders, ideology, and contact with minorities has clear outcomes in past research.
Theory

Theories about supervisors and organizational leadership

An employee’s supervisor can strongly influence how employees view themselves at work. This is outlined by Eder & Eisenber’s (Eder, Paul and Rober Eisenberger 2008) organizational support theory, where supervisors are seen as representative (a microcosm) of the entire organization. Organizational support theory claims that employees have a sense of perceived organizational support (POS) which they use to gauge (1) how much their job meets their socioeconomic needs and (2) the organization’s willingness to reward increased effort. Low POS results in withdrawal behaviors such as absenteeism, sabotage of equipment, and other unexpected costs which can cost an organization millions of dollars to resolve when they become widespread, recurring problems. In contrast, high POS results in favorable outcomes such as lower absenteeism and lower organizational deviance.

Furthermore, Eder and Eisenberger (2008), and Avery et al. (2008) point out a supervisor has a major social role. Supervisors hold a position of authority, but they have low social distance with non-managerial employees. This is why employees tend to view their supervisor as representative of upper management’s perceptions toward an employee, whether or not that is actually true (Avery et. al 2008). Employees tend to view a supportive supervisor as a form of organizational support. Employees who feel
they have a good relationship with their supervisor believe their organization has a supportive work culture. Hence, employees feel the need to significantly curb behaviors that are detrimental to the organization such as having very low absences at work, reporting instances of theft, and avoiding a “work to rule” mentality. Eder and Eisenberger’s (2008) and Avery’s (2008) work demonstrates the significance of testing the employee-supervisor relationship, but even their work has limitations. Previous literature has examined if supervisors mitigate unfavorable outcomes such as perceived discrimination (Stainback 2011) and absenteeism (Avery et. al 2008). However, the literature has not examined whether or not supervisors positively influence outcomes such as higher productivity or level of integration with one’s coworkers.

The limits of leadership

Although organizations desire effective supervisors, Tolbert and Hall (2009) note that sometimes good leadership and support can only do so much. This is especially true for supervisors who hold a low rank within larger organizations. Several theories in organizational sociology take a much broader approach towards explaining employee well-being and performance. Examining their contributions illustrates alternative explanations to employee well-being, and why this study fills the gap that more macro-level theories typically cannot address. Organizational ecology argues that an organization, and in turn an employee’s experiences, are most affected by their business environment. For instance, perceived advancement is most affected by how an organization compares to its competitors. Organizations that are most likely to fail are small, specialist firms and this means they are more likely to promote employees because
of their weak bargaining power, giving the impression that the career ladder is fairly short and easy to traverse (Korczynski et. al 2006).

Neo-institutionalism argues organizational structure is highly influenced by organizations mimicking perceived leaders who face a similar problem. One example is the prevalence of current affirmative action policies. Few organizations deviate from how most organizations in their industry address affirmative action edicts (Stainback: 2005). Neo-institutionalists might argue the widespread use of popular diversity programs is due to organizational inertia, despite those programs’ severe, proven limitations. Hence this is a major reason why minorities tend to have lower representation in management and lower perceived advancement relative to White employees (Dobbin 2007).

Finally, job satisfaction and integration at work are heavily affected by the presence and implementation of family-care policies. Here again structure seems to an overriding predictor. Resource dependency theory argues the amount and type of benefits a group receives depends on how much the organization relies on said group. One example is the implementation of family-care policies. Effective family-care policies towards women are most likely to be modified and adopted when women make up a significant amount of labor pool and are difficult to replace (Korczynski et. al 2006).

Interaction still matters: leadership & disadvantaged groups

Two trends on race and work persist throughout the literature. First, many scholars in Business Administration, Organizational Psychology, and Sociology have noted that minorities are particularly affected by the race of their evaluator, usually receiving less favorable evaluations despite similar performances. Second, scholars also
note that minorities are more aware of racial issues at work, such as racial disparities in evaluations (Mason-Chrobat 2003; Geedes & Konrad 2003; Browne and Misra 2003).

Why different treatment due to race (and other ascribed statuses) still occurs is explained by Ridgeway’s (2009) work. Her concept, status construction theory, argues that a status difference becomes important when social worthiness and competence become attached to them. Cultural beliefs related to how certain groups should act will lead to higher or lower sanctions when that group breaks expectations. Status beliefs arise and become widespread very quickly. In her dual experiments, Ridgeway found that men gave higher negative sanctions toward women about behavior and presumed incompetency after only two interactions.

In spite of a plethora of theory and empirical evidence there are still gaps in the literature examining relationships between supervisors and employees. One of the more innovate, recent studies in the sociology of work is by Smith and Elliot (2001 & 2002) who utilized employment data to argue a same race supervisor may be an ultimately limiting effect. Their “sticky floor theory” suggests if the entry level work group is filled with enough minorities, it increases the likelihood those employees will have a same race supervisor (Smith & Elliot 2001) For instance, Blacks comprised only 7% of all supervisors in their data set, but were 6.9 times more likely to supervise black work groups as compared to work groups in general (Elliot & Smith 2001). This racial matching is ultimately a limiting effect because (1) minorities are not promoted into positions of authority unless it is to supervise their own demographic group, and (2) it results in low concentrations of minorities in middle and upper management. The authors’ explanation reflects Ridgeway’s theory (2009). Minorities are often assigned to
lower paying, supervisory positions because they are assumed to be better at monitoring a
growing, entry level labor pool when it becomes filled by employees of the same race.

Findings like Smith and Elliot (2001 & 2002) note same race supervisors may
have a limiting effect in regard to career advancement, but we do not know the quality of
the supervisor-employee relationship. Accounting for the interaction between
increasingly supportive supervising and minority employees may lead to positive results.
Perhaps having a supportive supervisor prompts Black and Latino employees to believe
their organization has strong career opportunities for minority employees, increasing the
effects a supportive supervisor may have on minority employees even more.
My study complements past work because it includes a reasonably large, statistically
significant sample of White, Black, and Latino employees, and can test the effects that
increasing supervisor support has on each racial group. This is an important relationship
that diversity initiatives would like to examine, but until now it has remained an elusive
relationship for scholars and professional circles to examine. This is due to the difficulty
of randomly sampling enough Black and Latino employees and having a sufficient
measure for assessing supportive supervising.

Structure and ascriptive statuses: how to get nurturing workplaces

Organizations may try to solve a serious labor issue through several means.
However, the sociological literature is divided in explaining what determines a successful
initiative. Kalev’s (2009) quantitative approach examines EEOC employment data from
1980-2002. Kalev finds that ascriptive inequality, be it gender or race, can be
significantly reduced depending how organizations restructure their division of labor.
Self-directed team based work, and cross training programs are often successful because they bring employees in contact with higher status employees, improving the chance of promotion; and often they provide greater voice and exposure to minority groups.

On the other hand, Vallas’ (2006) ethnography in paper and pulp mills shows why initiatives from above often fail. Valla’s work stresses the relational dynamics between employees and the proposed structure often lead to highly unpredictable outcomes. The initiatives for changing the workplace at the paper and pulp mills often failed because employees bring preexisting statuses and hierarchies to the new team based settings. Non-managerial employees refused to cooperate because they would not accept the manager’s attempts to change their tasks, often seeing these attempts as self-serving. Not taking into account ascriptive statuses, e.g. race and gender, often lead to unsuccessful workplace transformations because certain employees become alienated due to racial and gender lines. This occurs even when new, team based settings are introduced.

Upper management must take into account the prior structure that employees hold on to when they are forced into a new division of labor. Investing in better supervisors can bridge this divide. The scale that comprises increasing supervisor support includes gauging how well a supervisor is a facilitator, mentor, and technical expert. Results may show that investing in better supervisors significantly improves an employee’s productivity and well-being in the four outcomes of interest. This would achieve several common goals in management, and the means to achieve them are heavily grounded in the needs and input of employees. Vallas concludes by stating more research is needed on ascriptive inequality, leading to the second hypothesis of this study which examines if employees of color are particularly affected by supportive supervisors.
Hypothesis

Drawing on the theory and literature reviewed above leads me to the following hypothesis. My first hypothesis is (1) increasing supervisor support (a change in the independent variable) will be positively associated with higher levels of job satisfaction, perceived advancement, extra effort for organizational success, and sense of solidarity at work. My hypothesis is a test of organizational leadership, grounded in Eder & Eisenberger’s work (2008) which argues that a supervisor is often seen by employees as a rough barometer for how upper management and the rest of the organization values them. Support for this hypothesis will suggest that despite potential structural barriers such as a glass ceiling and the size of an organization (Hodson & Sullivan 2008), an employer’s behaviors and management style will noticeably influence an employee in these four dimensions of work.

The criteria (see appendix) I use for operationalizing increasing supervisor support can be broken into two sections: task related attributes a supportive supervisor has (e.g. having realistic expectations for performance) and attributes for successfully resolving work-family issues at work. The fact that the two different roles have such high inter-reliability (alpha .9) allows us to test the overall effect of increasing supervisor support more thoroughly.
My next hypothesis is (2) Blacks and Latinos will be more positively influenced by a supportive supervisor compared to Whites on all four dependent variables. There is a plethora of research which notes the evaluation bias against Black and Latino employees by supervisors and managers (Mason-Chrobot 2003; Elvira & Town 2001). Even in professional circles, Blacks and Hispanics are more likely to be bullied, informally excluded during meetings, or passed over when employers assign more complex, rewarding tasks (Roscigno, Lopez, Hodson 2009; Garcia Lopez 2008; Barnett et. al 2003). I see my hypothesis as a complement to these past works. Since having a very supportive supervisor would be a more uncommon experience for Blacks and Hispanics, this relationship may promote strong beliefs that their employer’s work culture and career ladder is especially open to minorities, resulting in greater employee well-being.
Data

Data for my study comes from the National Study of the Changing Workforce (NSCW). The NSCW is a nationally representative, repeated cross sectional survey by the Families and Work Institute which documents labor and family trends in America. The survey was conducted in two waves, one in 1997 (N= 2,877) and in 2002 (N=2,810). These were pooled into one data set for use by researchers. Both waves were conducted via telephone interviews by random digit dialing. The sampling design was stratified (by region), and consisted of unclustered random probability sampling. Eligibility for both waves were limited to respondents who (1) worked at a paid job or operated an income-producing business, (2) were 18 years or older, (3) were in the civilian labor force, (4) resided in the continuous 48 states, and (5) lived in a household with a telephone.

The 1997 NSCW Survey was conducted by Louis Harris & Associates using the questionnaire design from the Families and Work Institute. A total of 3,552 interviews from of 3,739 eligible households were completed, yielding a 95% response rate. Of the total sampled 2,877 were wage and salaried employees. The 2002 wave was performed by Harris Interactive (previously Louis Harris & Associates). The response rate was 98% with 3,578 eligible households resulting in 3,504 completed interviews. The 2002 wave yielded 2,810 respondents, later pooled with the 1997 wave as public use data for further research by scholars and non-academic researchers (NSCW 2004).
Sample

The 97& 02 survey featured a combined 5,687 American employees. To answer my research questions, wage & salaried employees without a work group, or without a supervisor were excluded from analysis (570 cases). Furthermore, I conducted listwise deletion of cases with missing data on any variables of analysis, resulting in a sample size of 4,502 respondents. I also created a dummy variable of the survey year to see any potential effects across time (the 1997 wave serves as the reference category).

One benefit of repeated cross sectional data is a certain amount of reliability in testing effects over time. Another noticeable benefit is a significantly larger sample size, hence the use of the two pooled waves of data. This study therefore features a large number of Black and Hispanics employees (n= 453 and n= 301 respectively). Given this reasonable sample size, I have the rare opportunity to examine the impact that effective leadership has on Black and Latino employees, and with sufficient power to detect statistical significance. Since this nationally representative survey was achieved through random sampling the results should be relatively representative of workers with supervisors in the United States.

---

1 The reduction of sample size (n = 1,115; 20% of sample) is not a significant concern for several reasons. First, my study features a robust sample size even after listwise deletion on all the variables of analysis.

Second, half of the dropped cases (n= 570) were because the respondents did not fall into my analytical sample of interest (employees without a supervisor).

Finally, income, a control variable, yielded the other majority of missing cases (n= 352), amounting to only 6% of the sample. It is common in survey research for a large number of non-responses for questions about income. All other independent and dependent variables had extremely small number of missing responses.
Method & Measures

To measure the effects a supportive supervisor may have on employees I conduct multivariate OLS regression, controlling for organizational size, number of hours worked per week, seniority, income gender, and race of the supervisor. The benefit of OLS as opposed to pooling responses to perform logistic regression is I can see if increasing levels of supervisor support leads to substantially higher variation in the predicted values for the dependent variables.

Dependent Variables

I test the effects a supervisor may have on employees on four central dimensions of work: job satisfaction, extra effort towards organizational goals, sense of solidarity at work, and perceived advancement opportunities (see table 1 for descriptive statistics). Responses for extra effort and solidarity were both originally coded on a 4 item Likert Scale: (1) “Strongly Agree” (2) “Somewhat Agree” (3) “Somewhat Disagree” (4) “Strongly Disagree.” Responses were reverse coded so higher values indicated greater effort and solidarity. Due to insight from an anonymous reviewer, education was dichotomized as college degree versus no college degree (ref. category) and is included as a control for supplementary analysis\(^2\) to see if the data retains statistical significance.

\(^2\) This is primarily because the job outlooks and experiences do usually differ among those with a college degree versus those who do not.
Job satisfaction

Job satisfaction was defined as “overall satisfaction as job” with responses ranging from 1 to 4: (1) “Very satisfied” (2) “Somewhat Satisfied” (3) “Not too Satisfied” (4) “Not Satisfied at all.” Responses were reverse coded so higher values reflected greater satisfaction. Employees enjoy their jobs for several reasons. It may be employees find meaning and dignity in work (intrinsic rewards), but also because their job allows them to juggle other important roles such as parenthood (extrinsic rewards). Hodson and Sullivan (2007) note an employer’s approachability to talk about family constraints are strong influences on job satisfaction. I am confident about my scale’s predicative power on job satisfaction because it captures two dimensions: (1) work & productivity issues and (2) how well a supervisor negotiates family emergencies with an employee. A mean of 3.38 suggests that on average Americans are satisfied at work.

Extra effort towards organizational goals

Extra effort is defined as “Willing to work harder than have to for Company Success.”. The idea that a supportive supervisor can inspire employee’s to go beyond the clearly defined tasks or expectations is an extremely relevant question for professional circles as well as social scientists. Respondents had interesting variation in their willingness to give extra effort at work (mean 3.46, std. deviation: .72) with 68% of employees either strongly agreeing (4) or gravitating toward agreeing (2.74).

Sense of solidarity of work

Respondents were asked if they “Feel Part of the Group of People I Work With”
with responses. The extent to which employees feel a part of the group at work with is a basic element of organizational culture. Considering issues regarding diversity, representative bureaucracy, and different theories on how to best integrate employees of different skill levels, this is an increasingly noteworthy area of research (Quinn et. al 2011). Not surprisingly, job satisfaction and sense of solidarity at work had a moderate correlation (.44). However, keeping both of these correlated variables yields valuable insights. For example, the results section shows that interacting supervisor support with race of employee only has a statistically significant effect on one of these variables (solidarity). This underlines the fact that a supervisor has a different amount of influence between these two variables.

*Chances for perceived advancement*

Perceived advancement was measured by asking the respondent if they had “a chance to advance in [their current] organization.” Responses ranged from (1) “Excellent”, (2) “Good”, (3) “Fair”, and (4) “Poor” which were reverse coded so higher values demonstrated greater perceived advancement opportunities at work. Descriptive statistics (table 1) show that 41% of respondents felt they had poor, or only a fair a chance to advance. This suggests that a large number of Americans feel their opportunities for career advancement is lukewarm at best.

Perceived career advancement opportunities is an interesting variable to analyze when measuring the effects a supervisor can have on their subordinates. A supervisor typically cannot hire or promote employees. That discretion belongs to a manager. However, supervisors may conduct formal or informal evaluations which may influence
the perception that an employee’s relationship with their supervisor is a rough indicator of the likelihood for getting a promotion.

Independent Variables

Increasing supervisor support

An unstandardized, nine-item scale (alpha .90) was created to measure the impact supervisor support had on the employees. All nine items can be found in the appendix which can be broken down into task-related attributes and managing family-work issues. The very high alpha suggests that increasing supervisor support is operationalized more effectively by including these two supervisor roles. Response items had a range from (1) “Strongly Agree” (2), “Somewhat Agree, (3) “Somewhat Disagree”, and (4) “Strongly Disagree”, which were then reverse coded so higher values indicated greater support. As presented in Fig. 1 and Fig. 2 the level of support an employee received (an average of the nine items) is interpreted as follows:

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>Level of Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very Low Support</td>
</tr>
<tr>
<td>2</td>
<td>Low Support</td>
</tr>
<tr>
<td>3</td>
<td>High Support</td>
</tr>
<tr>
<td>4</td>
<td>Very High Support</td>
</tr>
</tbody>
</table>

As an unstandardized scale (a continuous variable) some respondents fall within the gradations of the four benchmarks listed above measuring the quality of support.

Interactions with race

Additionally, I wished to see if increasing supervisor support influences on Black
(n= 453) and Hispanic employees (n= 301), more than White employees (n=3,543). Two 
way interactions ($\hat{Y} = a + b_1X_1 + b_2X_2 + b_3X_1X_2$) of supervisor support with race were 
created, with Whites as the reference category to test my hypothesis. Since my first 
hypothesis tested the supervisor-employee relationship in general (with no respect to 
race), I included an interaction for non- Hispanic, non-Black, non-White employees, 
coded as “Other” by the NSCW so my interaction tables would include the remaining 205 
employees coded as “Other.”

Significant variation in supervisor support

For descriptive purposes, I dichotomized supervisor support and ran t-tests to 
confirm that there was statistically significant variance between those with a supportive 
supervisor (mean ≥ 3) versus those with an unsupportive supervisor (mean < 3). Table 3 
compares the mean scores of these two groups on the four dependent variables. As 
expected, those with a supportive supervisor have a statistically significant higher level of 
job satisfaction, extra effort, solidarity at work, and perceived advancement opportunities.

Controls

Organizational size

The size of an organization is a significant predictor of several variables. People 
enjoy working in smaller organizations rather because of less top-heavy management, 
formalization, and anonymity (Hodson & Sullivan 2008). Hence, behaviors such as extra 
effort towards tasks and organizational citizenship are more prominent in smaller 
organizations. Responses were coded from 1 to 10 as follows:
A mean of 3.8 indicates that the average number of respondents tended to work in organizations featuring 75-99 employees (Coded as 5). The standard deviation (2.58) gives a better sense of context: 68% of employees work in an organization with under 25 employees (1.21) to fairly large organizations with just under 500 employees (6.38).

**Number of hours per week**

Respondents were asked “Number of regularly scheduled hours per week” with responses ranging from 0 to 96. On average respondents worked 37.75 hours with 68% of respondents working from 29.32 to 46.18 hours per week. Being overworked is an important control in this study because it “undercuts both supervisory behavior and supportive coworker relations” (Hodson 2001: 10).

**Seniority**

Seniority\(^3\), defined by the NSCW as the number of years in one’s current job or with current employer, is associated with higher job satisfaction, higher income, and more favorable working conditions. Seniority’s positive effects persist across educational levels, from high school drop outs to college graduates. Responses ranged from 0 to 47

---

\(^3\) Age was not included as a control due to the moderate correlation (.44) with seniority. Seniority was also top coded: 63 years (n=1) to 47 years to adjust for extreme outliers.
years of experience. Americans on average tend to have 7.79 years of experience with 68% of the respondents (1 std. dev.) having 0 to 16 years of experience.

**Income**

Although studies on pay for performance and public sector employment show that income does not have a perfect linear relationship with several variables (Quinn et. al 2010; Riccucci & Norma 2009), it is still an important control variable. Low paying jobs are often associated with low ceilings for advancement and notably high stressors. Annual income, defined as “personal earnings from all paid employers, pre-tax” ranged from $1,000 to $250,000 and was measured in increments of a thousand dollars after rounding and coding for extreme values.

**Gender**

Gender is also a well-documented predictor of perceived advancement. Women in general tend to receive lower paying jobs, more repetitive work, and not surprisingly experience “glass ceiling” which lowers high perceptions of advancement (Ridgeway et al 2009). Men made up 44.87% of the sample (n= 2,020) and women made up 55.13% of the sample (n= 2,482) with women as the reference category.

**Race of supervisor**

Highly generalizable research on Latinos and Blacks with the same race

---

4 Income was coded so that respondents earning $1,000 or less were coded as “$1,000” and extreme values were top coded to those earning $250,000 or more.
supervisors is still rare. Elliot and Sullivan (2001) are some of the few researchers that examine this relationship. The authors found there is “bottom-up” ascription at work: creating their “sticky floor” theory of work. As Latinos and Blacks comprise a higher percentage of entry level employees it significantly increases the odds they will have a same race supervisor. This is slightly exacerbated in larger organizations. Race of supervisor was constructed as a dichotomous variable 0 for “not same race as supervisor” (n = 1,083) which comprised 24.06% of the sample and 1 as “same race as supervisor” (n = 3,341) and made up 75.94%. Whites overwhelmingly had a supervisor of the same race (n = 3,125) demonstrating normative whiteness for immediate positions of authority.
Analytic Strategy

I use multivariate OLS regression to test my first hypothesis: the effects a supportive supervisor may have on an employee in regard to job satisfaction, perceived advancement opportunities, extra effort to achieve organizational goals, and sense of solidarity of work. The second hypothesis, does a supportive supervisor have a more positive impact on Black & Latino employees compared to White employees, was carried out via two way interactions. By creating dummy variables and then interacting that with the scale for supervisor support (Whites as reference category) it allowed me to see if increasing support was moderated by the race of the employee, a very practical question given the rising diversity of America’s workforce, including in professional fields. The benefits of using OLS, compared to logistic regression, are apparent when testing for interactions. Instead of collapsing categorizes into unsupportive and supportive supervisor relationships, I can pinpoint when precisely Blacks or Hispanics report higher levels of the dependent variables, which range from very low support to very high support. By not using logistic regression we are able to test much more theoretical complexity. We can see; for example, how much job satisfaction an employee would have with high supervisor support (mean of 3) compared to someone with very high supervisor support (mean of 4).
Taylor, West, and Aiken (2006) have also shown via Monte Carlo simulations (n=200) that OLS regression models featuring ordinal dependent variables can attain similar statistical power as ordinal probit and ordinal logistic models, albeit with some limitations. Their study showed that “differences across type of regression models were generally very small” (Taylor et. al 2006: 236), provided the ordinal variables for the OLS model were not highly skewed, avoided having coarse categorization: having just 2-3 response categories, and compensated with a larger sample size to attain the same power (.80). This study meets the author’s findings, allaying concerns that the results may be highly biased. All the ordinal variables are normally distributed, each variable has four response categories (ideally the variables would feature five response categories), and the reasonably large sample size provides some reassurance about the predicative power of the regression models.
Results and Findings

The context of Americans at work

An overview of the descriptive statistics (table 1) shows that most Americans worked in organizations with less than 500 employees; on average worked nearly 38 hours per week; on average earned an annual income of $36,375 with 68% earning between $7,965 and $64,785. Also most Americans had nearly 8 years of experience, Whites were much more likely to have a same race supervisor then Blacks and Hispanics, and although most respondent’s reported satisfaction at their jobs, a surprising number (41%) admitted their chances for career advancement seemed poor or mediocre. As defined by my scale, the amount of support an employee received from their supervisor is divided into four benchmarks.

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>Level of Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very Low Support</td>
</tr>
<tr>
<td>2</td>
<td>Low Support</td>
</tr>
<tr>
<td>3</td>
<td>High Support</td>
</tr>
<tr>
<td>4</td>
<td>Very High Support</td>
</tr>
</tbody>
</table>

Hypothesis 1: Increasing Supervisor Support will lead to higher job satisfaction, extra effort, solidarity, and perceived advancement:

Multivariate regression confirmed that increasing supervisor support (range: 1-4)
is associated with higher job satisfaction, extra effort, solidarity, and perceived advancement all of which are measured on a range from 1 to 4 (higher values indicating higher levels of the dependent variable). As **Table 5** reveals, in all four models, the coefficients for supervisor support is highly significant ($p < .001$). Even when controlling for important structural and employment characteristics (organizational size, seniority, hours per week, income, gender, and race of supervisor), supervisor support has a noticeable effect on these four areas of employee well-being and performance. Aside from being significant, the most interesting discussion comes in the details: how much a supervisor positively influences each dependent variable.

**Table 5.** illustrates that increasing supervisor support has similar levels of influence on job satisfaction ($\beta = 0.52$), solidarity at work ($\beta = 0.52$), and perceived advancement ($\beta = 0.60$). The extent that employees are influenced by increasing supervisor support on these three outcomes is considerable, best seen in the predicted values for each level of support. Results from the models are graphed in **Figure 1.** For example, employees with very low support have on average, low job satisfaction (1.99/4.0) whereas those with very high support have a notable amount of job satisfaction (3.56/4.0). Hodson and Sullivan (2007) note job satisfaction is heavily influenced by how well employers and staff handle family issues, five items in my scale, perhaps explaining why supervisor support in this study is a strong predictor of job satisfaction.

The amount of influence that increasing supervisor support has on solidarity is noteworthy. For example, those with very high support ($n = 861$) were much more integrated with coworkers (3.82/4.0) than even someone with high support (3.30/4.0).
However, table 5 and Fig 1. strongly supports literature which discusses the limits of leadership (Tolbert & Hall 2009), and how structural forces temper the idea that good leadership is the quick-fix to any organizational problem. First, increasing supervisor support positively influences perceived advancement ($\beta = 0.60$), and features the largest regression coefficient among the four models on the effects of supervisor support. Still, other factors need to be considered. For instance, a large number of respondents (41%) reported either poor or only fair chances for advancement, no doubt a reflection of broader job outlooks in American labor markets. The limits of good leadership are illustrated best in Fig. 1. Even though supervisor support does increase perceive advancement, that alone cannot change everything. For example, even those with very high supervisor support, the best case scenario in a supervisor-employee relationship, reported their advancement opportunities were only approaching good\(^5\) (2.92/4.0), not excellent (4.0/4.0). A discussion of potential structural barriers will be discussed afterwards in evaluating the control’s impacts, and in the conclusion.

Increasing supervisor support also has much less influence on encouraging extra effort towards organizational goals. In fact, increasing supervisor support is only about half as influential ($\beta = 0.26$) on promoting extra effort as influencing job satisfaction ($\beta = 0.52$), solidarity ($\beta = 0.52$), and perceived advancement ($\beta = 0.60$). This underscores past literature (Tolbert & Hall 2009; Hodson & Sullivan 2008; Korczyznski et. al. 2006) which discusses potential structural factors that influence employee productivity and cannot be controlled for in this study such as the health of the organization, and how the

\(^5\) The fact that employees in this case would have a predicted value of 2.92/4.0 suggests that employees on average gravitate towards saying their advancement opportunities were “good” (3.0/4.0).
organization is arranged (e.g. bureaucratic vs. matrix structure).

*Hypothesis 2: Increasing Supervisor Support will influence Black and Hispanics more positively than Whites.*

**The substance in non-significance**

Contrary to my expectations, increasing supervisor support does not have a stronger influence on Black or Hispanic employees in regard to job satisfaction, extra effort, or perceived advancement opportunities (table 6 lists the interaction findings). Still, after assessing the results, one could make the argument these findings are still encouraging. This is because increasing supervisor support is not any less influential (which would be represented by a statistically significant, negative coefficient) for Black and Hispanic employees compared to White employees in regard to job satisfaction, extra effort, and perceived advancement⁶.

**Confirmation of hypothesis 2: solidarity at work**

Results on solidarity at work (Table 6) indicate that increasing supervisor support has a greater impact on Black employees, compared to white employees. The results from this interaction are highly significant ($\beta = 0.18; p <.001$). As expected, when looking at race alone, Black employees report, on average, much lower levels of solidarity and integration at work ($\beta = -0.65$) compared to White employees (Barnett, Cerrero, and

---

⁶ Although the coefficient for Hispanics interacted with supervisor support is marginally significant ($p < .10$), the dummy variable (Hispanic) which comprises the interaction is not significant, hence we cannot say the interaction is statistically significant.
Johnson-Bailey 2003; Bonda 2007). However, when Black employees have a supportive supervisor they are more positively impacted than their White counterparts in regard to solidarity, and fitting in the larger work culture. The results also underscore the impact good leadership has. When supervisors are able to perform several of these (moderately correlated) tasks: e.g. having realistic expectations, being supportive with work problems, and managing family issues effectively they are able to help Black employees become especially integrated into the larger organization.

Still, there are some subtleties which are presented most clearly in Fig. 2. Blacks do have a higher interaction coefficient than Whites, in other words a supervisor’s impact on promoting solidarity has a stronger effect on Blacks employees than White employees. However, even though Blacks benefit more from supervisor support, they still do not report higher levels of solidarity at work than Whites except in best case scenarios when Black employees receive very high supervisor support (4.0/4.0), or close to very high supervisor support (e.g. supervisor support registers a 3.7/4.0 for a respondent). Still, the gap closes considerably when Black employees receive high support (3.0/4.0), although research has shown (Roscigno et. al 2009; Mason Chrobot 2003; Reskin, McCrier, Kmec 1999) this is still a more uncommon work relationship for Blacks compared to Whites.

_The impact of controls in hypothesis 1 & hypothesis 2_

The control variables were mostly consistent with the previous research. Organizational size was negatively associated with all four variables as people tend to dislike working in larger organizations, and are more cynical towards advancing when
the hierarchy is very tall (Tolbert and Hall 2009; Hodson 2001). Weekly hours was positively associated with perceived advancement and extra effort, capturing the fact that full time employees have better job outlooks than part time employees (Hodson & Sullivan 2007). Seniority was positively associated with three variables, although there was a negative association with perceived advancement ($\beta = -0.02$), possibly reflecting cynicalism from being passed over repeatedly at work.

Income had a very small positive influence ($\beta < 0.001$) on all four variables, confirming that simply paying employees more does not translate into much greater productivity, solidarity, or effort (Quinn et. al 2010). Having a same race supervisor was positively associated with more solidarity at work, and higher job satisfaction. Surprisingly, males reported lower job satisfaction ($\beta = -0.07$), extra effort towards tasks ($\beta = -0.05$), and solidarity at work ($\beta = -0.05$). Still, males reported higher perceived advancement ($\beta = 0.09$), consistent with previous research. No doubt these findings would be of interest to gender scholars for further analysis. The control’s effects when testing the interaction of supervisor support and race (see Table 6.) remained the same direction as in hypothesis one. Furthermore, the controls effects only marginally changed between the two models and maintained their statistical significance in almost all instances.

Supplementary analysis & robustness of results

As a further test, education was dichotomized into those with a college degree and those without a college degree. Stratifying by education did not significantly change the regression coefficients in any of the models of analysis ($\beta$ increase was $\leq .01$), nor did it
remove the statistical significance in the four models for hypothesis 1, nor the significant interaction between race and supervisor support for solidarity.

Despite ultimately controlling for seven well-known predictors, be they structural (e.g. org. size) or demographics (gender, education) the relationships of interest still held. This includes Blacks benefiting more from increased supervisor support in regard to solidarity.
Conclusion

Having a supervisor or an immediate boss is an extremely common relationship. The quality of this relationship is a concern all organizations must address with on some level. The question then is how much influence can this one position have on an employee’s well-being and performance? This is a serious concern given that supervisors are the first line of defense against problems at the entry level, and ideally promote a smooth flow of information and solutions between upper management and non-managerial employees.

The results from this study (Table 5, Fig. 1.) indicate that supervisors have very important social roles despite having a fairly low rank in (especially larger) organizations. Even after controlling for structural factors such as income, seniority, and key demographic factors (e.g. race of supervisor) the results confirm the first hypothesis. Supervisors influence their subordinate’s job satisfaction, they play a critical role on integrating employees at work, promote extra effort, and influence an employee’s perceived advancement opportunities.

This study supports and considerably expands the generalizability of Eder and Eisenberger’s (2008) perceived organizational support theory: employees use their

---

7 Although, as stated in the results section, a high percentage of employees (41%) have low hopes for career advancement, hence increasing supervisor support has notable influence, but still cannot solve low perceived advancement by itself.
relationship with their supervisor as a rough barometer for their advancement opportunities and how much the organization values them. The social roles that supervisors have are stressed in the findings. For example, the level of supervisor support an employee receives is highly influential on perceived advancement opportunities even though as an occupation supervisors do not decide who gets promoted. Supervisors are only one type of an employee, yet they dramatically affect solidarity. For instance, high supervisor support is linked to very high levels of employee solidarity and integration.

The influence of increasing supervisor support includes pooling two moderately correlated roles supervisors may excel in: task related skills and work-family managing skills. The notable influence supervisor support has on the three dependent variables demonstrates the value of training good supervisors in both these roles. Undertraining is a recurring problem in organizations because investing in good leadership are often costly and time intensive issues (Quinn et al 2010). As presented in Fig. 1, we can see the benefits of investing in better training, and why higher supervisor support would be a highly desirable asset for an organization. For example, if a large number of employees are not integrated at work, it quickly leads to organizational deviance, absenteeism, and a disgruntled work culture. Hence, one solution may be evaluating how effective a supervisor is within the organization, and focus on retraining them.

However, increasing supervisor support has a much smaller impact on promoting extra effort, demonstrating the limits of even the best leadership. This also confirms the findings of organizational ecology, and other macro level theories wherein good leadership is not the instant solution to any organizational problem, especially in regard
to a firm’s productivity and survival (Korczyzynski et. al. 2006). Aside from the controls in this study, alternative explanations may wish to test (on a micro level) the effects higher ranked employees (e.g. a manager or department head) may have on the dependent variable in question. More macro theories may wish to test for instance if the sector of employment is a more salient predictor. For instance, we know private sector employees differ considerably from public sector employees on perceived discrimination (Riccucci 2009), perhaps the same is true for the amount of extra effort that employees give.

Race and supervisor support

The 2nd hypothesis predicted that increasing supervisor support would more positively influence Hispanics and Blacks, compared to Whites, on all four dependent variables. My theory was since Blacks and Hispanics tend to suffer from evaluation bias and poorer supervisor-employee relationships more frequently, they may internalize a good supervisor relationship more. Perhaps because, among other reasons, this relationship may be interpreted as a sign that the organizational culture is especially open to minorities. The fact that employees of color may personally experience discrimination from a past supervisor, or hear more about poor employee-supervisor relationships through same race networks makes this a fairly likely scenario.

However, as shown in Table 6, increasing supervisor support’s effect on job satisfaction, extra effort, and perceived advancement is not moderated by race. On the other hand, it means the effects of supervisor support is not reduced just because the employee is Black or Hispanic. These results are especially useful for organizations with
a high number of minorities.

**Blacks and supervisor support: key insights**

Another outcome worth noting is increasing supervisor support appears to close the White-Black gap on how integrated employees feel at work (**Table 6**). The interaction for Blacks and supervisor support reveal that, on average, supervisor support has more of an impact making Blacks feel integrated at work compared to Whites (with the results being highly significant). Increasing supervisor support reverses the comparative trend Blacks experience, thus confirming my theory. Blacks experience greater alienation at work for several reasons, including bias from one’s supervisor (Roscigno et al. 2009. However, increasing supervisor support affects Blacks more than Whites, one could argue because it may be valued more since this is a more atypical working relationship with one’s immediate supervisor, thereby closing the gap on solidarity.

These results are particularly insightful for HR and diversity managers who are unsure how to allocate resources to address a large number of Black employees feeling disgruntled or alienated. My findings suggest trying to address high levels of Black alienation by investing in better training for their supervisors is one route supported by empirical evidence. **Fig. 2** illuminates this discussion further. Although supervisor support has a greater impact on making Blacks feel integrated at work, and the White-Black gap closes rapidly once Blacks experience high support (3.0/4.0), there is one important detail. Blacks do not report higher levels of solidarity than Whites except in the best case scenarios: when they receive very high supervisor support (bordering a 4.0/4.0).
Even then Blacks report only slightly higher levels of solidarity than Whites (3.89 versus 3.83). The results suggest a cautionary interpretation when discussing the limits of good supervising. This insight is only possible with OLS regression. By not collapsing categories such as in logistic regression we see that it is only at the apex of good leadership that Blacks report higher levels of solidarity than Whites.

Limitations

In spite of the rare opportunity to quantify the effects of good supervising, this study still suffers from the limitations associated with the research design and methods used. First, this study is repeated cross sectional, not longitudinal, which means we cannot measure if the effects supervisor support has on an employee persists over time. Second, the data was collected through random digit dialing which in turn excludes certain potentially eligible members (exclusion bias) such as paid employees without a landline telephone (an increasingly common scenario).

Theoretically, there may be another explanation why increasing supervisor support helps Blacks feel more integrated at work than Whites. Instead of Blacks internalizing a good employee-supervisor relationship more because it is so rare, perhaps greater supervisor support has a greater impact on Blacks because they face higher strains managing family/personal issues. As shown in the appendix, managing family emergencies makes up five of the nine items that comprise the scale for supervisor support. Scholars such as Reskin et al (1999) note race, gender, or even both, often heighten the strains one faces at work, for instance the double disadvantage Black
females have in managing family-work obligations. In this case, the interaction
coefficient may be stronger for Blacks than Whites because increasing supervisor support
helps Blacks resolve greater strains outside of work. This would make Blacks feel they
are an especially valued member since their supervisor is willing to accommodate them
in times of great personal strain. Focus groups would shed greater light on which tasks
are especially influential on closing the Black-White gap on solidarity.

Finally, supervisor support’s effect on extra effort may be due to reverse
causality. One could argue it is because employees show extra effort that they receive
greater support. However this speculation goes contrary to the flow of the literature in
multiple disciplines which has repeatedly shown the amount (and type) of organizational
leadership is typically a good predictor on influencing employees meeting their tasks and
beyond. Examples include research on the competing values framework on leadership,
job characteristics theory, management by objectives (Quinn et. al 2010). Even early
research from the Human Relations school (Hodson & Sullivan 2007) showed how much
good leadership and social skills has on encouraging greater productivity. Still, it is an
interesting proposition to consider. Does the employee behavior cause the level of
support? This is an interesting hypothesis to test, especially in longitudinal studies.

Future studies

Despite its limitations, this study provides significant understanding on how
influential supervisors can be in multiple contexts. Even more promising is the fact that
this data set’s potential has yet to be fully tapped. For instance, this sample features a
statistically significant number of Blacks and Hispanics with same race supervisors (n >100). One could compose three way interactions and see if Blacks and Hispanics, compared to Whites differ when they have (1) increasing supervisor support and (2) a supervisor of the same race. Furthermore, one could test interactions on increasing supervisor support and having a supervisor of the same gender. This topic is especially interesting considering women are typically expected to take on greater family and child rearing responsibilities, and since managing work-family issues makes up part of the scale for supervisor support, the results from that study may be very stratified by gender.

Additional applications of this study

The fact that increasing supervisor support positively influences all four dependent variables, and the effects are not suppressed by employees being Black or Hispanic has great applicability outside of academic circles. Since a high mean of all nine survey questions leads to higher levels of the dependent variables of analysis (especially for job satisfaction and solidarity), organizations can use the nine attributes that comprise the scale for supervisor support (see appendix) as a checklist for training better supervisors, managers, and other staff. Negotiating family/personal-emergencies makes up five on the nine items of this scale, and underscoring the importance of investing significant time/resources so supervisors and organizational leaders develop these skills as well, not just task related skills.

This research can be seen as a complement to sociological research on ineffective attempts to address diversity and other problems in the workplace (Dobbin et. al 2007;
Mckay and Avery 2005). Chrobat Mason (2003) notes that organizations usually spend less than 10% of their training budget towards implementing diversity, and most diversity training programs often last a day or less because diversity issues are typically a low priority for organizations, often leading to more harm than good. Dobbin notes, the least common diversity programs (diversity managers, mentor programs, task forces) are the most effective because they target structural gaps and not individual bias. Scholars such as Dobbin (2007) and Kalev (2009) make convincing arguments that one way to address diversity issues, especially higher minority representation in management, is to adopt one of these three diversity initiatives.

On the other hand, these three diversity initiatives require the most restructuring and resources devoted to implementing them. My study can be seen as a feasible, alternative solution for organizations, especially smaller ones. Instead of adopting these initiatives, one could invest in better training for supervisors since my findings suggest a better supervisor fosters greater perceived advancement opportunities, extra effort, and job satisfaction without losing an impact on employees of color (with even greater impact on Blacks for solidarity). Additionally, better organizational leaders, including those who have an especially positive effect on integrating Blacks, may be a catalyst in facilitating policy outputs that benefit minority populations, i.e. contributing to representative bureaucracies (Coleman, Brudney, and Kellough 1998).

Supervisors and nurturing workplace environments

Vallas (2006) showed that top-down ideas to transform the workplace fail because
they do not get rid of hierarchical interests, ascriptive statuses, and preexisting working conditions. Team based settings collapse miserably when they lack an effective coordinator who can make sure employees and managers are not strictly driven by their occupational interests or former routines. My study underscores how influential supervisors are on several levels. Organizations can use that knowledge as they create procedures to transform the workplace. Developing supportive supervisors may be a necessary first step before employees can buy into new structures such as cross functional teams or self-directed groups which are designed to provide a more egalitarian workplace (Kalev 2009). Prior to actually implementing change, organizations may wish to chart out who should be the key facilitators and then spend considerable time developing immediate authority figures. This is an especially attractive idea considering that among the four dependent variables, supervisor support is most influential on promoting solidarity which is exactly what is needed in new, cross-functional, team based settings.

In short, this study’s discussion on supervisor support, and if the effects are moderated by race, brings much needed attention to understanding how important the employee-supervisor relationship is, one that pervades every industry today.
References


APPENDIX: Tables and Figures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean / Perc.</th>
<th>S.D.</th>
<th>Obs.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>3.37</td>
<td>.69</td>
<td>4,502</td>
<td>1 to 4</td>
</tr>
<tr>
<td>Perceived Chances for Advancement</td>
<td>2.63</td>
<td>1.03</td>
<td>4,502</td>
<td>1 to 4</td>
</tr>
<tr>
<td>Solidarity at Work</td>
<td>3.53</td>
<td>.74</td>
<td>4,502</td>
<td>1 to 4</td>
</tr>
<tr>
<td>Extra Effort Towards Organizational goals</td>
<td>3.46</td>
<td>.72</td>
<td>4,502</td>
<td>1 to 4</td>
</tr>
<tr>
<td>Supervisor Support Scale</td>
<td>3.36</td>
<td>.63</td>
<td>4,502</td>
<td>1 to 4</td>
</tr>
<tr>
<td>Race</td>
<td>100%</td>
<td></td>
<td>4,502</td>
<td></td>
</tr>
<tr>
<td>White employees</td>
<td>78.70%</td>
<td></td>
<td>3,543</td>
<td>ref cat.</td>
</tr>
<tr>
<td>Blacks employees</td>
<td>10.06%</td>
<td></td>
<td>453</td>
<td></td>
</tr>
<tr>
<td>Hispanic employees</td>
<td>6.69%</td>
<td></td>
<td>301</td>
<td></td>
</tr>
<tr>
<td>Other employees</td>
<td>4.55%</td>
<td></td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>Hours per Week</td>
<td>37.75</td>
<td>8.43</td>
<td>4,502</td>
<td>0 to 96</td>
</tr>
<tr>
<td>Seniority</td>
<td>7.79</td>
<td>8.29</td>
<td>4,502</td>
<td>0 to 47</td>
</tr>
<tr>
<td>Race of Supervisor</td>
<td>100%</td>
<td></td>
<td>4,502</td>
<td></td>
</tr>
<tr>
<td>Not same as employee</td>
<td>24.06%</td>
<td></td>
<td>1,083</td>
<td>ref. cat</td>
</tr>
<tr>
<td>Same as employee</td>
<td>75.94%</td>
<td></td>
<td>3,419</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>100%</td>
<td></td>
<td>4,502</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>44.87%</td>
<td></td>
<td>2,020</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>55.13%</td>
<td></td>
<td>2,482</td>
<td>ref. cat</td>
</tr>
<tr>
<td>Organization’s Size</td>
<td>3.8</td>
<td>2.58</td>
<td>4,502</td>
<td>1 to 10</td>
</tr>
</tbody>
</table>

Table 1. Descriptive Statistics for Variables (Continued)
Table 1. Descriptive Statistics for Variables (Continued)

<table>
<thead>
<tr>
<th></th>
<th>Income</th>
<th>Survey Year</th>
<th>Education (supp. analysis)</th>
<th>Total Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36,375</td>
<td>100%</td>
<td>100%</td>
<td>4,502</td>
</tr>
<tr>
<td></td>
<td>28,410</td>
<td>4,502</td>
<td>4,502</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,502</td>
<td>4,502</td>
<td>4,502</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$1,000 - $250,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997 Wave</td>
<td>36,375</td>
<td>4,502</td>
<td>2,206</td>
<td>ref. cat.</td>
</tr>
<tr>
<td>2002 Wave</td>
<td>28,410</td>
<td>4,502</td>
<td>2,296</td>
<td></td>
</tr>
<tr>
<td>Education (supp. analysis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No College Degree</td>
<td>36,375</td>
<td>4,502</td>
<td>2,474</td>
<td>ref. cat.</td>
</tr>
<tr>
<td>College Degree</td>
<td>28,410</td>
<td>4,502</td>
<td>2,028</td>
<td></td>
</tr>
<tr>
<td>Total Sample Size</td>
<td></td>
<td></td>
<td></td>
<td>4,502</td>
</tr>
</tbody>
</table>
Table 2. Tabulation: Chances for Advancement

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>820</td>
<td>18.21</td>
<td>18.21</td>
</tr>
<tr>
<td>Fair</td>
<td>1,057</td>
<td>23.48</td>
<td>41.69</td>
</tr>
<tr>
<td>Good</td>
<td>1,576</td>
<td>35.01</td>
<td>76.7</td>
</tr>
<tr>
<td>Excellent</td>
<td>1,049</td>
<td>23.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>4,502</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Two-Sample t test with Equal Variances

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Mean for Not Supportive Supervisor</th>
<th>Mean for Supportive Supervisor</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>2.84</td>
<td>3.52</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Extra Effort</td>
<td>3.21</td>
<td>3.53</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Solidarity</td>
<td>3</td>
<td>3.68</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Perceived Advancement</td>
<td>2.06</td>
<td>2.79</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Table 4. Cross-Tabulation: Same Race as Supervisor?

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Same Race</td>
<td>418</td>
<td>333</td>
<td>197</td>
<td>135</td>
<td>1,083</td>
</tr>
<tr>
<td>Same Race</td>
<td>3,125</td>
<td>120</td>
<td>104</td>
<td>70</td>
<td>3,419</td>
</tr>
<tr>
<td>Total</td>
<td>3,543</td>
<td>453</td>
<td>301</td>
<td>205</td>
<td>4,502</td>
</tr>
<tr>
<td></td>
<td>Job Satisfaction</td>
<td>Extra Effort</td>
<td>Solidarity</td>
<td>Advancement</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------</td>
<td>-------------</td>
<td>------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Supervisor support</td>
<td>0.52***</td>
<td>0.26***</td>
<td>0.52***</td>
<td>0.60***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td></td>
</tr>
<tr>
<td>Organizational size</td>
<td>-0.01</td>
<td>-0.02***</td>
<td>-0.02***</td>
<td>-0.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.01)</td>
<td></td>
</tr>
<tr>
<td>Hours per week</td>
<td>-0.00</td>
<td>0.01***</td>
<td>0.00</td>
<td>0.01**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
</tr>
<tr>
<td>Seniority</td>
<td>0.01***</td>
<td>0.00**</td>
<td>0.00***</td>
<td>-0.02***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>0.00***</td>
<td>0.00</td>
<td>0.00*</td>
<td>0.00***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>-0.07***</td>
<td>-0.04*</td>
<td>-0.05*</td>
<td>0.08**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.03)</td>
<td></td>
</tr>
<tr>
<td>Same Race as Supervisor</td>
<td>0.06**</td>
<td>0.03</td>
<td>0.07**</td>
<td>-0.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.03)</td>
<td></td>
</tr>
<tr>
<td>2002 Wave</td>
<td>0.06***</td>
<td>0.09***</td>
<td>0.03</td>
<td>-0.07*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.03)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.46***</td>
<td>2.34***</td>
<td>1.73***</td>
<td>0.50***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.08)</td>
<td>(0.07)</td>
<td>(0.11)</td>
<td></td>
</tr>
</tbody>
</table>

N 4502 4502 4502 4502

Standard errors in parentheses

+ p<0.10  * p<0.05  **p<0.01  *** p<0.001

Table 5. The Effect of Increasing Supervisor Support
<table>
<thead>
<tr>
<th></th>
<th>Job Satisfaction</th>
<th>Extra Effort</th>
<th>Solidarity</th>
<th>Advancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black employee</td>
<td>-0.09</td>
<td>-0.18</td>
<td>-0.65***</td>
<td>-0.31</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.17)</td>
<td>(0.16)</td>
<td>(0.23)</td>
</tr>
<tr>
<td>Hispanic employee</td>
<td>-0.05</td>
<td>-0.20</td>
<td>0.32</td>
<td>-0.45</td>
</tr>
<tr>
<td></td>
<td>(0.20)</td>
<td>(0.23)</td>
<td>(0.21)</td>
<td>(0.31)</td>
</tr>
<tr>
<td>Other employee</td>
<td>0.03</td>
<td>0.21</td>
<td>-0.43+</td>
<td>-0.41</td>
</tr>
<tr>
<td></td>
<td>(0.22)</td>
<td>(0.26)</td>
<td>(0.25)</td>
<td>(0.35)</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>0.52***</td>
<td>0.25***</td>
<td>0.50***</td>
<td>0.58***</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Organizational size</td>
<td>-0.01</td>
<td>-0.02***</td>
<td>-0.02***</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Hours per week</td>
<td>-0.00</td>
<td>0.01***</td>
<td>0.00</td>
<td>0.00**</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Seniority</td>
<td>0.01***</td>
<td>0.00**</td>
<td>0.00***</td>
<td>-0.02***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Income</td>
<td>0.00***</td>
<td>0.00</td>
<td>0.00*</td>
<td>0.00***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Male</td>
<td>-0.07***</td>
<td>-0.04</td>
<td>-0.05*</td>
<td>0.08**</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Same race as Supervisor</td>
<td>0.02</td>
<td>0.04</td>
<td>0.05+</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>2002 Wave</td>
<td>0.06***</td>
<td>0.09***</td>
<td>0.03</td>
<td>-0.07*</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Black X Supervisor support</td>
<td>0.0</td>
<td>0.06</td>
<td>0.18***</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.07)</td>
</tr>
</tbody>
</table>

Table 6. Interaction: Increasing Supervisor Support & Race of Employee (continued)
Table 6. Interaction: Increasing Supervisor Support & Race of Employee (continued)

<table>
<thead>
<tr>
<th></th>
<th>Hispanic. X Supervisor support</th>
<th>Other X Supervisor support</th>
<th>Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.01 (0.06)</td>
<td>-0.04 (0.07)</td>
<td>1.51*** (0.07)</td>
</tr>
<tr>
<td></td>
<td>0.06 (0.07)</td>
<td>-0.07 (0.08)</td>
<td>2.36*** (0.09)</td>
</tr>
<tr>
<td></td>
<td>-0.09 (0.06)</td>
<td>0.11 (0.07)</td>
<td>1.83*** (0.08)</td>
</tr>
<tr>
<td></td>
<td>0.15+ (0.09)</td>
<td>0.10 (0.10)</td>
<td>0.59*** (0.12)</td>
</tr>
</tbody>
</table>

N = 4502

Standard errors in parentheses

"+ p<0.10  * p<0.05  ** p<0.01  *** p<0.001"
Figure 1: Effect of Increasing Supervisor Support on Employees
Figure 2: Interaction: Supervisor Support and Race on Solidarity at Work

My Supervisor keeps me informed of things I need to do job well
My Supervisor has realistic expectations of my job performance
My Supervisor recognizes when I do a good job
My Supervisor is supportive when I have a work problem
My Supervisor is fair when responding to employee personal/family needs
My Supervisor accommodates me when I have family/personal business
My Supervisor is understanding when I talk about personal family issues
I feel comfortable bringing up personal family issues with my supervisor
My Supervisor cares about effects of work on personal/family life

Figure 3: Items for Scale: Increasing Supervisor Support