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Worker Behavior on the Job: A Multi-Methods Study of Labor Cooperation with Management

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Abstract In the 2000s, the leadership of the International Brotherhood of Electrical Workers (IBEW) called for labor-management cooperation from its rank and file members in response to concerns about increasing competition from the nonunionized electrical contracting sector. The IBEW's leadership implored members to cooperate by altering their behavior on the job, thereby modifying the effort bargain between workers and management. To date, this type of cooperation with management has been little studied. Using qualitative and quantitative data collected from one Local of the IBEW, this study analyzes how workers responded to the leadership's call and the factors guiding this behavior. Among the findings, cooperative behavior on the job is found to be strongly associated with workers' attitudes, as measured by their commitments to their occupation and to their union.

Keywords Labor-management cooperation · Unions · Union commitment · Occupational commitment

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Introduction

U.S. industries and occupations have experienced dramatic declines in unionization since the early 1980s (Fiorito 2007). Even among electricians, a very highly unionized subsector of the construction industry, the unionization rate declined from 54.4% in 1983 to 34.2% by 2010, with a particularly precipitous decline in the early to mid

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2000s (Hirsch and Macpherson 2011). In response to these trends, in 2005 the leadership of the International Brotherhood of Electrical Workers (IBEW) called for labor-management cooperation from its rank and file members. Cooperation has been cited by researchers as a solution to staving off increased competition from non-union workers (Schuster and Weidman 2006; Tallon 2007). Specifically, in his 2005 State of our Union address, IBEW president Edwin Hill urged rank and file members to "make every minute [on the job] count" (Hill 2005). In the parlance of organizational behavior, he asked workers to change the way they enacted their in-role responsibilities. However, just because union and management leaders agree to work together, this does not guarantee that workers will comply with this request (Ospina and Yaroni 2003). Using qualitative and quantitative data gathered from an IBEW Local following this call for cooperation, this study examines how union electrical workers enact cooperative behavior on the job and identifies the factors associated with this behavior.

This study fits into two extant literatures: studies on labor-management cooperation and studies on individual behavior in the work place. Labor-management cooperation is far from a new topic. Jacoby (1983) documented cooperative efforts undertaken as early as the 1920s. Cooperation can take a variety of forms including, but not limited to, participation of union leadership in organizational decision making, the formation of labor-management committees, mutual gains bargaining, and the implementation of work-life programs (e.g. Masters et al. 2006; Deery and Iverson 2005; Kochan et al. 2008). A distinguishing feature of this study is that cooperation is defined at the worker-level rather than in terms of organizational structures. In the context studied here, worker behavior had been obstructive to productivity and managerial interests. The IBEW Union leadership asked workers to put aside these behaviors and instead perform their in-role responsibilities, effectively calling for worker cooperation with management. In this regard, the study fits into the long literature on social relations in the workplace and effects on worker behavior and productivity. Recent research on workplace behavior has focused on examining making out (satisfying one's own needs while meeting organizational demands) (e.g. Burawoy 1979; Hodson 1991), resistance/deviance (e.g. violating management's/organizational rules and norms) (e.g. Aquino et al. 1999; Bennett and Robinson 2000; Hodson 2001), and citizenship behavior (going above and beyond role prescriptions) (e.g. Hodson 2001; Organ 1988). Cooperative behavior by workers, as defined here, is distinct from both citizenship behaviors and from the most severe forms of resistance/deviance which consists of behaviors such as sabotage and theft. Rather, cooperative behavior by workers, as described by IBEW President Edwin Hill and used here, is conceptually closer to reducing production deviance/resistance, when the latter is defined as soldiering, or working below capacity.

Findings from the qualitative research (semi-structured interviews with IBEW members and electrical contractors) and quantitative analysis of survey data collected from 245 employed IBEW members yield a number of important insights. First, they suggest that electrical workers, by and large, heeded the IBEW president's call. The workers enacted cooperation through in-role behaviors that fall into three distinct categories: pace of work, keeping to prescribed times, and focus on task. Second, the interviews suggest that worker attitudes (occupational commitment, union commitment) played a role in contributing to cooperative behavior. Quantitative analysis of

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survey data collected from the IBEW membership corroborate the qualitative findings. We find that attitudes are statistically significant, even after controlling for social relations between workers and supervisors and managerial practices.

While electricians and the IBEW are not representative of all workers or all unions, the study's findings should be of potential interest to a broader set of union leaders as well as academics. For instance, when union leaders call for cooperation with management, the findings suggest it is workers with high union commitment who are likely to be most cooperative, above and beyond perceptions about treatment from supervisors. Thus it is imperative for union leaders to make clear its agenda towards working with management and to foster union commitment in its members. From a broader academic standpoint, this study adds to the body of literature that has identified the importance of worker attitudes, measured here as union and occupational commitment, on worker behavior. Not only does union commitment enhance willingness to contribute to union activity (Bamberger et al. 1999), but it also can be a key ingredient in fostering cooperative behavior on the job.

Research Setting: IBEW Local

This study examines the extent to which workers responded to the union leadership's call for cooperative behavior on the job using data collected from IBEW electrical workers in 2007–2008. An important feature of the context studied is that the IBEW, which was formed in 1890, has a long history of strong adversarial relations between the rank and file and employers (Palladino 1991). As discussed further shortly, the Local, for much of its history, has been very powerful and workers have been able to bend terms of collective bargaining agreements in their favor and shut down jobs when it saw a need (e.g. the presence of nonunion workers at a jobsite).

Nonetheless, this Local has been affected by the same broad factors leading to declining rates of private sector unionization across all industries and types of workers. Researchers point to changes in the industrial structure (as the United States shifts from a manufacturing to services and information-oriented economy), globalization, firms' increased opposition to unions, and changes in legal and institutional factors that may have affected union organizing activity (e.g. Farber and Western 2001; Fiorito 2007; Godard 2009). In recent years, employment losses in construction and its subsectors have been further compounded by the devastating decline in the U.S. housing market in 2007 and the massive downturn in the broader U.S. economy, which officially began in December of 2007 and concluded in June 2009 (Ohanian 2011).

Figure 1 provides unionization rates for the period 1973 to 2010. At its high point in the 1950s, the unionization rate in the United States for private construction workers was 80% (Tallon 2007). As shown in Fig. 1, by 1973 that figure had fallen in half, to just 40% and by the end of the 2000s, to just 13%. Even among electricians, a highly unionized subsector of construction workers, unionization rates declined dramatically: In 1983, the first year for which data are available, the figure stood at 54.4% (as compared to 27.5% for private construction workers), and the rate stood at 34% by the end of the 2000s.

Starting in 1995, in order to stave off potential loss of market share to nonunion contractors, the leaders of the IBEW forged a more cooperative relationship with the

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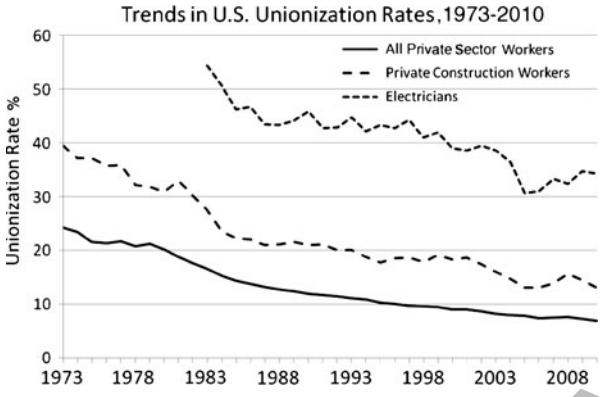

Fig. 1 Trends in U.S unionization rates. Data are from Barry Hirsch and David MacPherson, "Union membership and coverage database from the CPS," from Unionstats.com. [Accessed 17 June 2011]

leadership of the National Electrical Contractors Association (NECA), the professional association of electrical contractors. Together they formed the National Labor Management Cooperation Committee (NLMCC). Both IBEW and NECA leadership agreed that pursuing more cooperative relations, and thereby delivering better customer service, could help the position of the unionized electrical sector vis a vis nonunion firms (NECA website 2011).

In 2005, after continued declines in rates of unionization, Edwin Hill, president of the IBEW, made a direct appeal to the union rank and file (Hill 2005) in a video called "State of the Union" produced under the auspices of the NLMCC. This video was made available to over 17,000 electrical contractors and 350 IBEW local unions (PR Newswire 2005). Hill posed the situation in stark terms, describing the IBEW's situation as at a crossroads, with the future to be determined by the actions of every union member on every job. Using data and insights from an independent industry analyst, he pointed to union workers' flagrant lapses of properly executing in-role responsibilities as a major contributor to the perceived loss of business to the nonunion electrical contracting sector. Indeed, the qualitative survey evidence discussed later for a single Local points to a range of behaviors that were counterproductive to getting the job done, such as making a job take longer than it should, taking longer breaks and lunches, and leaving the worksite early at the end of the day.

Hill asked workers to ask themselves the following types of questions (edited for brevity): Do you arrive on time? Do you keep breaks to 10 minutes? Keep lunch to the allotted time? Show up and leave at the specified time? Hill called for the rank and file to engage in cooperative behavior on the job, thereby seeking to modify the effort bargain between workers and management. Noting that "we are all in this together," he also pointed to management's role, including ensuring that tools and materials are up to par so that workers can properly execute their jobs.

Following Hill's widely-disseminated speech, a Code of Excellence, which codified these in-role cooperative efforts, was voluntarily adopted by many IBEW locals (Hill 2006).[1] By October 2007, the NECA Board of Governors voted to make training on the Code of Excellence a part of all future NECA-IBEW contracts (NECA

[1] The Code of Excellence is available at http://www.ibewhourpower.com/. [Accessed 6 December 2011].

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2007). Consequently, workers were exposed through various channels to the idea of cooperating with management.

Theory: Labor-Management Cooperation and Effort Bargains

Renegotiation of the effort bargain is often described in the context of worker resistance (Hodson 1995, 2001). However, it also could be a mechanism for labor-management cooperation, as in the case studied here. Effort bargain refers to the negotiation and "agreement" between managers and workers about how much effort workers should exert on the job (Edwards and Scullion 1982; Hodson 1995). In instituting and adhering to a labor-management cooperation agenda, adjusting the effort bargain could translate into workers meeting in-role expectations to a greater extent than they had in the past. Cooperation, as part of the effort bargain, refers to performing in-role required behaviors that are part of one's job and that specifically help move a project along. As used here, cooperation includes keeping to prescribed times (e.g. limiting lunch and break times, starting work at the assigned time), attending to the pace at which one works (e.g. doing tasks in a timely way), and focusing on task (e.g. cooperating with other trades workers when a task requires it). Cooperation is different from organizational citizenship behavior which refers to employee behaviors that improve productivity and cohesion at work but are extra-role behaviors that are above and beyond what is required by one's job and are not explicitly rewarded (Hodson 2001; Organ 1988). It also is distinct from most forms of workplace deviance. Robinson and Bennett's (1995) typology divided forms of deviance into four types: property (e.g. sabotage), political (e.g. showing favoritism), personal aggression (e.g. sexual harassment) and production. Production deviance, which includes acts like taking excessive breaks and intentionally working slowly, is similar to what sociologists refer to as soldiering, or withholding effort and working below one's capacity (Roy 1953).

Indeed, we can think of workplace behavior as a continuum from serious resistance (e.g. sabotage, theft) at one end to citizenship behavior (doing more than what management expects) at the other end. In the middle of the continuum, respectively, are production deviance (doing less than what management expects) and cooperation (engaging in behaviors that are prescribed by one's role). In the case studied here, IBEW president Edwin Hill is calling for the rank and file to fully perform their in-role responsibilities.

Effort bargain negotiations occur in several ways. They may take place formally through union contract negotiations in which provisions for length of work day and lunch and number of breaks allowed are negotiated. They also may occur informally between supervisors and workers on the job through mechanisms such as unspoken arrangements, bartering, and threats (e.g. Kuhn 1961; Mechanic 1962; Molstad 1988). Effort bargains also occur a third way, and often more subtly, when organizations restructure and introduce a new labor process or through job enrichment programs. In such cases workers may be given more autonomy and take on more decision making responsibility than they had previously (e.g. Barker 1993). Finally, renegotiation of the effort bargain can be viewed, not just as setting up formal rules, but as calling for the existing rules to be followed. In the case here, union leaders are calling for the compliance of membership to existing rules.

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Asking workers to change the way they work and increase their effort can be viewed by workers as a burden and perhaps a violation of their psychological contract (Rousseau 1990) with their employers.[2] Historically workers often have reacted negatively to the imposition of demands for greater worker effort (Jacoby 1983) and more recently, studies have provided evidence of resistance when new work arrangements were instituted (e.g. Graham 1995; Smith 1990; Vallas 2006).

However, workers do not always resist and may actually consent by working longer hours, taking on more responsibility, by adapting to a new labor process, or as in this case, fully meeting already established in-role responsibilities. What are the factors likely to influence cooperative behavior? The first explanation relates to the social relations of the workplace. Employees' perceptions of supervisory treatment are likely to influence worker behavior on the job such that workers tend to exert more effort when they perceive they are treated well by their supervisors (Hodson 2001; Roscigno and Hodson 2004; Roethlisberger and Dickson 1939). It is expected that workers are more likely to fully execute in-role responsibilities if social relations in the workplace are better, all else equal.

A second explanation for employee cooperation comes from the business management literature and suggests that organizations take specific steps during the change process to enhance employee cooperation (Christensen et al. 2006). Such measures include encouraging employee participation in the change process, recognizing employees' efforts toward meeting the goals of the change program, empowering employees, and removing obstacles to change (Kotter and Schlesinger 2008). Asking for employee input and empowering employees facilitates employee buy-in to the change. Recognizing employees' efforts provides positive feedback. In the case studied here, the IBEW president explicitly pointed to a specific management practice critical to success: management needs to ensure that required tools are available and in good condition. Enabling workers to perform their jobs removes an obstacle to cooperative behavior.[3]

A final explanation for cooperation that has not yet been adequately explored in the literature is the role of employee *attitudes* as predictors of how workers enact their in-role responsibilities. Two such attitudes identified in the structured interviews, and examined here, are occupational commitment and union commitment, and are discussed in greater detail below.

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[2] A psychological contract, as defined by Rousseau, is an individual's beliefs regarding the terms of a reciprocal exchange between himself/herself and another party, in this case, the employer.

[3] Other motivations for cooperative behavior have been suggested as well. For instance, scholars have suggested that when workers are formed into self-managing teams, they have a greater sense of control and identify more strongly with their employer, thereby making them more likely to cooperate with management (Vallas 2006). In the case studied here, formation of teams was not used as an approach to garner cooperation and so is not explicitly examined. Concern over job security may also motivate employees to engage in cooperative behavior. For instance, Smith (2001) found that when workers perceived that their options for stable employment elsewhere were limited, they exerted more effort and took on more responsibility. Regrettably, the survey did not ask questions about perceptions of job insecurity. However, concern about lack of such information is attenuated by the fact that the survey was conducted at a single location at a single point in time, and so all workers faced the same economic reality, likely reducing the variation in perceptions.

Occupational Commitment

An occupation is a line of work comprised of "requisite skills, knowledge, and duties that differentiate it from other" lines of work (Lee et al. 2000: 800). Although occupational commitment has been conceptualized as an affective attachment to one's occupation, Meyer et al. (1993) have expanded the construct to include two additional dimensions: continuance commitment - recognition of the high costs associated with leaving the occupation, and normative commitment - a sense of obligation to remain in the occupation. Occupational commitment has been closely linked to organizational commitment, particularly for employees working in corresponding organizations, i.e. where workers are core employees (Lee et al. 2000; Mathieu and Zajac 1990; Wallace 1995). However, in cases where there is a strong external labor market and where mechanisms for job placement are institutionalized, one is relatively less reliant on a particular organization in order to engage in one's occupation (McDuff and Mueller 2000) and the two types of commitments would be more loosely coupled. Given the potential for interfirm mobility for unionized electrical workers through a hiring hall that organizes the labor market, occupational commitment would be the more relevant construct to consider in explaining workplace behavior in this context.

Occupational commitment has been linked to several behavioral outcome variables including a negative association with voluntary absenteeism and a positive association with organizational citizenship behavior (Cohen 2003; Meyer et al. 1993). In a meta-analysis, Lee et al. (2000) found a moderate and positive correlation between occupational commitment and supervisory ratings of job performance. They proposed that strong commitment to one's occupation would lead one to set higher performance standards and a greater willingness to achieve these standards. An alternative explanation for the link between occupational commitment and the way individuals conduct themselves on the job is through workers' involvement in occupational communities. In occupational communities, where individuals have strong identities as occupational members, practitioners are likely to adopt the values and behavioral norms of the community (Van Maanen and Barley 1984). In the context of labor-management cooperation, it is likely that workers with higher occupational commitment would not only aspire to achieve high quality work in order to represent their occupation well but also would engage in cooperative behaviors that the community is advocating. Consequently we should expect that workers with relatively high occupational commitment would engage in activities that yield pride in work and at the same time enhance task achievement. Therefore, under either explanation, we should expect that workers with high occupational commitment would be more likely to practice cooperative behaviors on the job.

Hypothesis 1 There will be a positive relationship between occupational commitment and reported cooperative behavior on the job.

Union Commitment

Union commitment has been conceptualized in various ways with a varying number of factors (Bayazit et al. 2004; Friedman and Harvey 1986; Gordon et al. 1980).

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However, one dimension is common to each of these conceptualizations: affective attachment to the union, or union loyalty. While considerable work has been done examining the impact of union commitment on union participation (Bamberger et al. 1999) and union citizenship behavior (Tan and Aryee 2002), we know relatively less about its effect on in-role workplace behaviors.

Research on the impact of unions on worker behavior has yielded mixed results. For example, while Rubin (1986) found that a strong union presence enhanced worker militancy, Hodson (1999) found a union presence had no influence in guiding resistance or citizenship behavior of workers. However, studies that incorporate union presence typically overlook two important dimensions. They do not account for workers' commitment to the union nor do they consider the union's agenda - i.e. adversarial or cooperative relations with management. We need to consider the position the union is taking in terms of working with management since employees may be more willing to support workplace innovations when the union is involved in establishing the new work arrangements (Eaton et al. 1992; Vallas 2003). Second, we need to consider member commitment since workers' likelihood of conforming to union leadership's position may vary depending on whether members have relatively strong or weak attachments to the union. We should expect that the more committed members are to the union, the more likely they will adopt union leadership's position and act in ways that support that position.

Given committed members' inclination to support the union through participation in union activities, it is reasonable to expect that committed members would also support the union by incorporating the union's agenda and approach toward management. In the case of the IBEW Local, where union leadership is supporting cooperation with management, we should expect that committed union members will be more likely to engage in cooperative workplace behavior.

Hypothesis 2 There will be a positive relationship between union commitment and reported cooperative behavior on the job.

Data and Methods

Data

The analysis focuses on data collected from an IBEW Local during the period November 2007 through summer 2008. After preliminary conversations with the leaders of the Local IBEW and the local chapter of NECA in which we were introduced to the regional problems of the unionized electrical contracting industry, the data collection proceeded in two steps. First, from November 2007 through February 2008, the first author conducted open-ended, semi-structured interviews with eight of the Local's signatory contractors and 12 members of the IBEW Local. We sought to learn about the unionized electrical contracting industry, to gain insight into the issues that were central to both workers and management, and to detect similarities and differences in viewpoints between the groups, as well as within each of the groups. The interviews allowed us to not only learn how electrical workers account for their own actions but also enabled us, as researchers, to put together a

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meaningful framework to explain their workplace behavior, and to uncover the extent to which this behavior "matched" the call of the IBEW president. In the second step, during summer 2008, we executed a survey based on information gleaned from the interviews and subsequently analyzed the data using quantitative methods.

Interviews

The contractor interviews were conducted with the owners/presidents of electrical contracting firms in the region. Three of the firms were large in size, two were medium-sized, and three were small. Six of the contractors were members of NECA; two were not. Average interview length was approximately 1 hour.

For the employee interviews, we selected and contacted workers from a list of the Local's members. Twelve interviews were conducted, each at the Local's Training Center. Most of the individuals we contacted agreed to participate; a few women hesitantly said no due to childcare responsibilities after work. There are three primary subfields of IBEW members covered in this research: industrial/commercial, residential, and VDVS. VDVS is the newest category of workers covered by the IBEW and these members install wiring for voice, data, video, and security technology. Seven respondents were journeymen, two were residential wiremen, and three were VDVS/Communications. Eight of the respondents were men, four were women. Respondents ranged in age from 27 to 58. Ten were white, two were African American. Three were currently in foreman positions[4]; an additional respondent indicated she had been a foreman in the past. Three respondents were currently unemployed (unattached to a particular contractor firm). The respondents were promised confidentiality; interviews were audio recorded and transcribed. The average length of the interviews was approximately 57 minutes.

Interview transcripts were read several times and coded by the first author. While coding centered on dimensions that were the focus of the interviews, such as behaviors on the job, management practices, and attitudes toward labor-management cooperation, the interviewer was also attendant to emergent themes. For example, workers made it apparent that the foremen influenced how workers experienced their jobs and this information was then incorporated into the questions for the quantitative survey. Based on the information obtained from the formal interviews, conversations with the leaders of the Local IBEW and the local chapter of NECA, and theories and concepts from the academic literature, a survey was constructed and subsequently administered to a stratified sample of randomly-selected IBEW members in the summer of 2008.

Quantitative Survey Methodology

The survey group was identified as follows. Seventy three employers from the list of the Local's signatory contractors were selected and then categorized by size (large,

[4] We adopt the language used in the field. Consequently, the language in the paper is not gender-neutral. Women are referred to as journeymen, wiremen, and foremen. Similarly, workers in the industrial/commercial sector are referred to as journeymen, and residential wiremen when they work in residential sector.

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medium, and small based on manhours for 2006). Based on size of the employer, 495 workers were selected to receive the employee survey. Twenty five electrical workers were selected from each of the seven largest contractors, nine employees were selected from each of the ten medium-sized contractors, and four electrical workers were selected from the 50 small firms in the employer sample. Next, for each of the firms selected, the percentage of each contractor's business in the VDVS sector was calculated and selection of employees from each company was proportionate to that percentage. For example, if 15% of a firm's manhours were devoted to VDVS/Communications, then 15% of the employees from that firm selected for participation in the study were VDVS/Communications workers. Six contractors whose total business was VDVS/Communications were selected to participate and 3–7 employees from each of these firms were surveyed as well. In addition, fifty electrical workers who were on the Local's books as currently unemployed also were selected to receive the survey. A second mailing of the survey was administered to non-respondents 3 weeks after the initial surveys were sent out. In both mailings, a letter from the Local's Business Manager encouraging member participation was included in each envelope.

In addition to standard demographic and employment information, the survey asked respondents to report their behavior on the job (9 items), the frequency with which managers used particular practices (4 items), their perceptions of their supervisors (3 items), and their attitudes toward their occupation (15 items) and the union (7 items). For employees, indicating one's behavior at work could be considered sensitive information. Although there is evidence of the accuracy of self-reports, generally (Spector 1992), several steps were taken to evoke honest responses. Surveys were sent to the recipients' home address. A cover letter on University stationary addressed to "IBEW member" was included with the survey assuring the confidentiality of respondents. Surveys were marked with only an identifying number. Respondents were instructed to return the survey in the enclosed prepaid envelope directly to the first author at the University. The letter from the Local's Business Manager that was included in the packet also assured respondents that all responses were confidential. These steps were taken to reduce any differential between actual behavior on the job and behaviors that respondents reported on the survey.

Of the 545 surveys sent out, 271 persons returned a usable survey, yielding a response rate of 49.7%.[5] Of these 271 surveys, 26 respondents reported being unemployed. The sample frame used responses for those currently employed only, yielding an analysis sample of 245 (51.4% of total surveys sent out to employed individuals). These 245 employed respondents were located in 61 different organizations. Average demographic characteristics (employer size, age, sex, type of worker) for the total usable surveys (271) and employed sample (245) are virtually the same with one exception.[6]

[5] A total of 291 surveys were returned but 20 were disqualified for various reasons, yielding the 271 figure reported in the text. Most were disqualified because the respondents indicated they were retired or they were still in the apprentice program. Two were disqualified because of the pattern of the responses – all answers were at the extremes of the scales provided, raising questions about the seriousness/truthfulness of the responses.

[6] African Americans returned 4% of usable surveys ($n=10$), but the percentage employed was just 2.4%.

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Next we compared the characteristics of the employed sample with the initial sampling frame. We found that the employer characteristics matched up fairly closely: 41% of the employed sample are employees of large contractors (35% of the surveys were sent to employees of large contractors), 19% of the employed sample are employees of medium sized contractors (18% of the surveys went to employees of medium sized firms), and 40% of the employed sample are employees of the small contractors (48% of the surveys went to employees of small contractors). In the employed sample, respondents were 96% male, 96% White, 2.4% African American, 80% journeymen, 9% residential wiremen, and 10% VDVS/Communications. The average age of respondents was 44.5 and they had an average tenure in the IBEW of 17.8 years. The average tenure with their current contractor was 7.8 years and the median tenure was 5 years. Less than a quarter of the sample (22.7%) was with their current contractor for only 1 year or less. We also sought to compare the demographics of the Local's membership with the sample characteristics above. Although the Business Manager did not have exact figures for the demographics of the Local's membership, he claimed the sample was representative of the Local based on sex, age, IBEW tenure, and subfield. African Americans were underrepresented in the sample; the Business Manager estimated that Blacks comprise approximately 10% of the membership. Given that virtually all respondents are white and male, the subsequent quantitative analysis does not include controls for race or sex.

Variables Used in Quantitative Analysis

The quantitative analysis of cooperative behavior draws from the academic literature reviewed in the prior section as well the interview findings. Cooperative behavior is modeled as a function of three major potential contributing factors: attitudes (occupational commitment and union commitment), social relations (perceptions of supervisory treatment), and managerial practices, as well as standard control variables for firm size, worker subfield, IBEW tenure, and organization tenure. As discussed in the literature review, social relations of the workplace (perceptions of supervisory treatment) and managerial practices are well recognized as contributing to worker behavior. To what extent do worker *attitudes*, holding these factors (and other control variables) constant, play a further role?

The key variable of interest, and the dependent variable in the empirical model, is cooperative behavior on the job. Drawing upon information learned in the interviews, the survey asked nine original questions about in-role behaviors that were considered part of the electrical worker's job. The items, described in Table 1, capture three dimensions of cooperative behavior: the pace at which one works, keeping to prescribed times, and focus on task. The survey asked employees to indicate the extent to which they agreed with statements about these behaviors using a 5-point scale (1=strongly disagree; 5=strongly agree). Cooperative behavior was measured by averaging the responses to the nine items. This composite measure yielded α=.69.[7]

[7] Confirmatory factor analysis of the nine items indicated an acceptable fit for a three factor model (χ^2= 45.29, df=24, p=.005; CFI=.93; RMSEA=.06) which was an improvement over a one factor model (χ^2= 74.57, df=27, p=.000; CFI=.85; RMSEA=.08). Despite this support for three factors, low internal consistency of these factors (α) did not warrant using three separate dependent variables.

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Table 1 Survey items used to measure cooperative behavior on the job

	Mean	s.d.
Pace of work		
I try to do each of my assigned tasks as fast as I can	4.21	.84
Each workday I try to accomplish as much as I can	4.55	.62
Sometimes I work more slowly than I know I am able to (reverse scored)	4.25	1.09
Keep to prescribed times		
Sometimes I extend my break time in the morning (reverse scored)	3.84	1.03
I take no more than 30 minutes for lunch every day on the job	3.5	1.16
Every workday I start working at 7:00 AM	4.52	.71
Focus on task		
I volunteer for overtime work when it is needed	4.09	1.08
I cooperate whenever I can with other tradesmen when tasks require me to interact with them	4.68	.55
I rarely waste time at work	4.20	.82
Cooperative Behavior Scale (all nine items)	4.20	.48

Note: Sample is employed survey respondents, n=245. Items were scored on a 5-point scale: 1=strongly disagree; 5=strongly agree. The dependent variable is the average, based on all nine items

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Managerial practices also was measured using original items discussed by interviewees about such practices in this sector. The survey asked respondents to indicate the frequency with which top managers engage in specific behaviors using a 5-point scale (1-never; 5=always). Table 2 shows the specific items used to create a managerial practices scale and their descriptive statistics. The managerial practices measure yielded α=.81.[8]

The other independent variables were measured using previously validated scales. Occupational commitment is measured using 15 items drawn from the occupational commitment scale (Meyer et al. 1993) (7 point scale). According to Cohen (2003), in studies where multiple types of commitment are tested, only the loyalty dimension/subscale of union commitment should be used. Union commitment was measured with 7 items from the loyalty subscale of union commitment (Friedman and Harvey 1986) (5 point scale). Perceptions of supervisory treatment is measured using 3 items from the Job Diagnostic Survey (7 point scale).

Several standard control variables also were included in the model. Size of the firm for which the electrical worker worked was included due to the possibility that employee behavior and management practices might vary depending on firm size. Subfield of worker was included due to the possibility that the different types of workers may engage in different types of behavior on the job (norms of the subfields). IBEW tenure was the third control variable and was included based on the potential differences in behavior and work attitudes between long-time and newer members. Organization tenure, or the number of years the respondent has been employed by

[8] Results of a confirmatory factor analysis show the items loaded on one factor (χ^2=3.84, df=2, p=.15; CFI=.99; RMSEA=.061).

Table 2 Survey items used to measure managerial practices

	Mean	s.d.
Provides tools in good condition to get the job done	3.97	.76
Wants electrical workers' input on how to get a job done more effectively	3.41	1.21
Expresses appreciation to electrical workers for their hard work	3.40	1.22
Acts in ways that shows the contractor trusts electrical workers on the job	3.75	1.00
Managerial Practices Scale (all four items)	3.63	.85

Note: Sample is employed survey respondents, n=245. Items were scored on a 5 point scale: 1=Never; 2=Rarely; 3=Sometimes; 4=Usually; 5=Always

his/her current contractor, also was included since workers with longer tenure may have a greater attachment to their employers which may affect their behavior on the job. Finally, as noted earlier, since practically all of the respondents were White and male (96% and 96% respectively), no controls for race or sex are included.[9] IBEW tenure and AGE are highly correlated (r=.71). Since both reflect experience, only IBEW tenure is included. See Table 3 for a description of the variables used in the quantitative analysis with their means and standard deviations.

Empirical Model

The model explaining cooperative behavior on the job was analyzed using hierarchical OLS regression, with clustered standard errors. First, just the control variables were included. Second, the social relations or management practices variable was added.[10] Then, in the third step, attitudes were included as well, highlighting the contribution of attitudes, above and beyond these other factors. Standard errors were clustered by contracting firm (employer) since the responses of multiple workers from the same employer may not be independent of each other, particularly for their reporting of managerial practices, and their residuals may be correlated. The regression analyses include responses of employed workers only.

As with any quantitative analysis, the methodology has limitations. One limitation of the analysis is that the survey data are cross-sectional (collected in summer 2008) and therefore we need to be cautious about claims of causality. For example, the relationship between perceptions of supervisory treatment and worker behavior is likely reciprocal to some extent. Although the model suggests that perceptions of supervisory treatment will have an effect on cooperative behavior, it also is likely that worker behavior on the job influences supervisor treatment. That is, a worker who engages in cooperative behavior may evoke more support from a supervisor than a worker who does not put in as much effort. This concern is most relevant in looking at findings regarding perceptions of supervisory treatment because the wording of the question was personal – the kind of treatment I receive from my foreman. The concern about causality is less likely an issue between managerial practices and worker

[9] Preliminary tests of the model indicate these variables make little difference in the results.

[10] Theoretically, the model should include measures of both social relations and management practices. Given the high pair-wise correlation of these measures (.526), they are not included together in the estimated models.

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Table 3 Description of variables used in regression analysis

Variable	Description	α	M	SD
Dependent variable				
Cooperative behavior	Average score for 9 original survey items, (5-point scale) (See Table 1 for items)	.69	4.2	.48
Independent variables				
Perceptions of supervisory treatment	3 items from Job Diagnostic Survey (7 point scale)	.95	5.58	1.37
Managerial practices	4 original survey items, (5 point scale) (See Table 2 for items)	.81	3.63	.85
Attitudes				
Occupational commitment	15 items from occupational commitment scale (Meyer et al. 1993) (7 point scale)	.85	5.67	.85
Union commitment	7 items from loyalty subscale of union commitment (Friedman and Harvey 1986) (5 point scale). Negatively worded items were rewritten as positively worded items (Bayazit et al. 2004)	.83	4.46	.49
Control variables				
Organization size	Large		.41	.49
	Medium		.19	.39
	Small		.40	.49
Worker subfield	Workers were categorized according to type of IBEW membership			
	Journeyman		.80	.40
	Residential Wireman		.09	.29
	VDVS/Communications		.10	.30
IBEW tenure	Membership in IBEW, in # of years		17.76	11.24
Organization tenure	# years respondent has been employed by current contractor		7.81	8.06

Note: Sample is employed survey respondents, n=245

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behavior given the items were more generalized in nature; they refer to management's activities in how they deal with the staff, in general, and were not based on a one-on-one relationship between management and a particular respondent. Although a worker's behavior may affect a supervisor's treatment of that individual, any one individual's behavior on the job is less likely to condition managerial actions toward the staff as a group. Some prior research also suggests the possibility of a relationship between cooperative decision making and union commitment but their findings are mixed (Hoell 2004; Geary 2008). Further, these findings may not transfer to this study given that the type of cooperation analyzed here—performing in-role responsibilities—is of a very different nature. In light of this discussion, the regression findings obtained here are discussed as associations rather than as causal relationships.

The clear benefit of collecting and analyzing data on a specific case (in this situation, the IBEW Local, after 2005) is the opportunity to learn very specific information following the IBEW leadership's call for cooperative behavior on the job. On the other hand, given the survey design used, we only have quantitative information from a single source within the Local – the IBEW member. While this

makes the data vulnerable to common method bias, several procedural steps were taken to reduce the impact of this possibility (Podsakoff, et al. 2003). First, different scale formats were used in the survey. Scale anchors were varied to reduce the likelihood that construct covariation was caused by scale properties rather than the content of items. For example, some scale anchors ranged from strongly disagree to strongly agree, another was a frequency scale, ranging from never to always, and another was anchored using very dissatisfied to very satisfied. Second, the survey's cover sheet and the cover letter from the IBEW guaranteed respondents both anonymity and confidentiality. This precaution should reduce the likelihood that respondents answered the questions in ways that were socially desirable.

One other limitation of the research design is that the quantitative work is fully based on a survey administered post 2005 (after the call for cooperation) and so we cannot quantify the change in workers' behavior using before and after measures. Nonetheless, the interviews, both with workers and employers, provide first-hand accounts of how workers changed their behavior, obviating this concern to some extent.

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Findings

This section presents results from the qualitative and quantitative analyses, yielding important insights into the context that led to the call for cooperation, workers' response to the call, and the factors that guided their behaviors.

The Context

The interviews revealed that the Local studied here historically has had very strong bargaining power vis a vis management. In describing workers' previous approach to work, one contractor stated:

> 7:00 is our start time. Guys sitting around at the gang box, having coffee, reading the paper at 7:15. The customer walks by and there's no attempt to say, hey, guess we better get going. Rather, it's I'm not finished reading the paper. Just kind of an in your face, hey we're electricians and we're union electricians.

Another contractor stated the ways in which workers had been engaging in counterproductive behaviors, including "making a job that one person should be able to do, a two-person job. Working not as fast as they should, slowing down, taking longer breaks, quitting early. Instead of picking tools up at 3:15, pick up tools at 3:00. So they cut a half hour off the day. Longer lunches." This perception of worker noncompliance with terms of the contract was echoed by employee respondents as well. For example, one worker said, "Some people are taking advantage of our union and showing up late or leaving at 3:10. Really not giving a full day or just taking advantage of the benefits and stuff we have."

The Pursuit of Cooperation

For the union leadership, cooperation meant providing better customer service, which meant improving worker behavior on the job (Hill 2005). Though cooperation often

incorporates union/worker involvement in decision making, in this case of the electrical workers, worker participation was kept to a minimum and when sought, it was confined to operational issues in the field. One worker explained the IBEW's pursuit of cooperation as follows:

> [Behavior on the job] used to be really bad but then we had the whole crackdown. They were getting phone calls about electricians walking around on the phone or electricians taking hour lunches. It was making us all look bad. All the companies got together and they made us watch this video from the [IBEW] International about hey, you need to be at work 8 hours a day. And while you're there, you need to be working. An extra 5 minutes of break adds up to thousands of minutes during work hours for the whole year. They really got on us. I think it's a lot better. It used to be leaving at 3:00, picking up at 3:00 and leaving at 3:05 instead of staying until 3:20 or 3:25 like you're supposed to. But I think it has gotten a lot better.

The Business Manager of the Local also played a key role in trying to change workers' understanding of what is required behavior on the job. One contractor stated, "[The Business Manager] is just constantly out talking to people, talking to the men, telling them they gotta wake up." Another contractor described the Business Manager's efforts and the nature of his message and said,

> One of the biggest things is changing perceptions. You're not the only act in town. You do have competition. You do have to show up to work on time. You do have to be dressed properly. You do have to have a haircut. You do have to be willing to work all day. You do have to act like you're a guest in somebody else's house as opposed to you're the only act in town. Those are the sorts of things [the Business Manager] is working and striving towards.

Besides messages from the union leaders to improve labor-management relations, the contractors also have made efforts toward improving their relationship with workers by educating workers about the challenges of running a unionized contracting business, clarifying their expectations of worker behavior on the job, and by considering the way they treat their employees. For example, one contractor stated,

> Say a practice -if 3:30 was the quitting time, ten after three electricians are driving off the parking lot. We've pretty much indicated that that can't continue. Just the attitude of you need to be productive. If we're gonna pay you eight hours of pay today, you need to give me 8 hours of work. We as a company have to be profitable to stay in business and the owner, the guy ultimately paying the bill has to get what he thinks is a fair job. We work hard at having those conversations, telling the guys our expectations. It's not in a threatening way. It's not, if you do this, we're going to fire you. That only goes so far.

Another contractor stated, "My dad, toward the tail end knew that cooperation was starting to happen and that he didn't have to yell at everybody everyday to get productivity out of them. Being out there, giving them a pat on the back sometimes."

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Workers' Responses to the Call for Cooperation

Though many members understood the need for the shift toward cooperation and understood there were potential benefits, some were skeptical of the agenda and of the sincerity of contractors. One respondent who was supportive of the cooperation effort saw the possibilities of win-win outcomes. He said,

> I think it's a real good thing. There's a lot of nonunion out there. There's a lot of competition. I think the better we work together, the better the jobs are gonna get done, and everybody's gonna win in the end. We're gonna keep a job and they're gonna make money. I think the push for cooperation is a very good thing. There used to be the old feeling, like forget them, we're on our own, we don't need them. Well, we need them and they need us.

Skepticism was expressed in a variety of ways. For example, one worker whose family members had been IBEW members before her was concerned that the union was giving away many of the benefits that others fought hard to get. Another worker expressed the notion that the union was giving up things while it was not clear what the contractors were doing to demonstrate cooperation. This worker stated,

> A lot of things are based on appearance now. You have to have your shoes and safety glasses and hard hat and now they want everybody to wear orange vests. But on the job where they require all this stuff they may be sawing concrete next to you, putting a lot of dust in the air. In my opinion, something that's really pertinent to safety and health issues, they a lot of time ignore, but they still expect us to hold up our end… I think cooperation is I go to work, I do my job the best I can for the contractor. In turn from him, I expect him to bid smaller work, get all the work they can to keep me employed…Without cooperation you get nothing. But we can't be the one compromising all the time.

Though skeptical, members stated that this was the direction the current (democratically elected) union leadership was promoting, and even though they didn't always agree, they went along because they followed the union leadership. One worker stated, "I'm not a [elected Business Manager] supporter but I'm going to support him and the decisions he has made because he's our leader right now."

Support for the union was high among these respondents. They talked about union pride as a value shared across the Local. They were not only proud to be IBEW members, but proud to be members of this Local. One worker stated,

> I think pride in the union is one of the biggest [shared values]. I take a lot of pride in saying – I don't tell people I'm an electrician, I tell them I'm a Local (number omitted) electrician, I'm a union electrician. Not that I think that makes me better than anyone but I take pride in that. I've paid my dues and now I can say, hey, I've done your schooling, this is what I am, this is what I do.

Another worker expressed her commitment to the union by stating,

> I'm an electrician for Local (number omitted) first and foremost and I go by their book of rules. Now when I go to a different contractor they're going to

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> give me a separate book of rules and that's going to be my rules for the contractor. And if some kind of dispute arises on a job, like if it's a question of whose work is it or something with our union rules, that's going to come first before contractor rules. Like if there's nonunion people on a job, we're going to leave because they're there. We're not required to leave, but a good union - you're not going to work behind a picket, you just don't. I'm a union, Local (number omitted) electrician, I'm not a [company name] electrician.

Other workers also expressed their support for the union's agenda and engaging in cooperative behavior on the job. As one worker said, "A good union man is somebody who does his job. First off, does his job." Another stated,

> It used to be the electricians were the first ones off the job. Now, we're the last ones off the job. But we're getting paid till 3:30 and we're still to our car by 3:30. Yeah, it sucks getting home 10 minutes later than you're used to. But it's nothing that isn't in our contract that we didn't agree to when we voted for it.

These statements point to union members' strong commitment to their union and their union's agenda. Occupational commitment also appeared to guide electrical workers' behavior on the job. Respondents reported liking their trade and would not want to do anything else. As one wireman stated, "I probably couldn't see myself doing anything else. I do well financially and I like what I'm doing. I did financially well at other things but it wasn't what I felt was my calling, I guess." According to the workers with whom we spoke, a good electrician is someone who is knowledgeable, does good quality work at a good speed, and is concerned with providing value to the customer. These respondents were proud to be electrical workers, and took much pride in their own workmanship. For example, when asked what values or attitudes were widely shared among electrical workers, one respondent stated, "We all want to do a good job. We're all professional. We've been trained here by the apprenticeship program. We know what to do." Another worker expressed a similar shared value. He stated,

> Pride in work. That is a very big thing at least as far as most of the people I know. Pride in work is a big value. If you do a good job and it looks nice, you feel like hey, look at this. This is what I did. You can stand back and look at it and you feel pretty good about it.

Electrical workers also tended to speak disparagingly of peers that diverged from these occupational norms. One respondent said, "I work with guys that we call slop artists - they just slop it in. Their favorite phrase is that the dry wall covers it. To me that means they're not taking pride." In sum, these workers liked doing electrical work and took pride in doing their work well, indicative of their commitment to their occupation.

The interviews suggest that although electrical workers had mixed feelings about consenting to an altered effort bargain, many had nonetheless adjusted their behavior on the job. Workers' comments highlight the importance of the union and their commitment to their occupation in guiding cooperative behavior at work. These findings were subsequently tested using data collected from the administered survey.

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Quantitative Analysis

Tables 1, 2, 3, 4 and 5 provide results from the quantitative analysis based on the 245 responses from employed IBEW workers. The items used to measure the dependent variable, cooperative behavior, and their descriptive statistics are shown in Table 1. The composite scale and most of the items had means above 4.0 (on a 5-point scale) indicating that the electrical worker reported that they engaged in relatively high levels of cooperative behavior on the job. The lowest scoring items were related to extending their lunch and break times. These items also had relatively large standard deviations suggesting that there was considerable variation among workers in conforming to the daily work schedule.

Table 3 shows the descriptive statistics of the variables used in the regression analyses. These figures indicate that IBEW members scored relatively high on union commitment (4.46 on a 5-point scale) and occupational commitment (5.67 on a 7-point scale). Interestingly, the average tenure of workers with their employer was almost 8 years. The data also indicate that fewer than 23% of the respondents had been with their employer for a year or less. Despite the image of contingent work that we may associate with construction work, these workers were not shifting from employer to employer much. Furthermore, ANOVA results indicate that there was not a significant difference in cooperative behavior on the job reported by employees who had less than 1 year tenure with their employer compared to employees with more than 1 year tenure (F=.10, p>.05). In other words, worker behavior was similar regardless of whether one's status was "contingent" or more "permanent."

The correlation results, shown in Table 4, indicate several interesting relationships among the variables. First, the correlation between union commitment and cooperative behavior was positive and moderately strong (r=.41), suggesting that members who were committed to the union also reported engaging in cooperative behavior on the job. Second, those members with longer tenure in the IBEW also reported lower levels of union commitment (r=-.14) and lower levels of cooperative behavior on the job (r=-.22).

Table 5 shows the results of the regression analyses with cooperative behavior on the job as the dependent variable. For Models I and II, the variables were entered in steps, with the control variables entered first.[11] In step 2, managerial practices and perceptions of supervisory treatment were entered into Models I and II, respectively, testing alternative explanations for cooperative behavior. In step 3, the attitudinal variables were included. Step 3 of both models indicate that residential wiremen and VDVS workers reported engaging in more cooperative behavior on the job compared to journeymen. This may be due to different work norms in the subfields.

Interestingly, after controlling for other factors, IBEW tenure was significant and negative in Model II although the magnitudes of the coefficients were quite small. Long-time members who have been in the occupation for many years and may have first-hand knowledge of "how things used to be" in more adversarial times were slightly less likely to report engaging in cooperative workplace behavior than newer members. Tenure with one's contractor had no effect on workplace behavior.

[11] Step 1 for Models I and II consists of the same set of variables. The coefficients differ because of slight differences in sample size due to missing observations on variables used in steps 2 or 3.

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Table 4 Correlations of variables used in regression analysis

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Cooperative Behavior	–												
	Organization Size													
2	Large	−.18**	–											
3	Medium	.07	−.40**	–										
4	Small	.12	−.68**	−.40**	–									
	Subfield													
5	Residential Wireman	.20**	−.27**	.27**	.06	–								
6	VDVS/Communications Worker	.12	−.15*	−.03	.18**	−.11	–							
7	Journeyman	−.24**	.32**	−.18**	−.18**	−.65**	−.68**	–						
8	IBEW Tenure	−.22**	.13*	−.05	−.10	−.23**	−.33**	.42**	–					
9	Organization Tenure	.007	.12	−.04	−.10	−.07	−.18**	.19**	.45**	–				
10	Perceived Supervisory Treatment	.23**	−.07	.05	.03	−.07	−.02	.07	−.01	.01	–			
11	Managerial Practices	.18	−.04	.08	−.03	−.05	−.09	.10	.08	.06	.53**	–		
	Attitudes													
12	Occupational Commitment	.38**	−.04	.02	−.02	−.02	−.05	.05	.09	.06	.18**	.22**	–	
13	Union Commitment	.41**	−.04	.11	−.04	.08	−.02	−.05	−.14*	.02	.23**	.24**	.46**	–

Note: Sample is employed survey respondents, n=245; n reduced for missing responses.

Variable definitions in Table 3. Omitted category for organization size is small; omitted category for subfield is journeymen.

*p<.05. **p<.01

Table 5 Results of OLS regression analyses, dependent variable is cooperative behavior

	Model I			Model II		
	1	2	3	1	2	3
Organization size - large	−.11	−.10	−.10	−.11	−.09	−.07
	(.07)	(.05)	(.05)	(.07)	(.06)	(.06)
Organization size - medium	−.02	−.05	−.06	−.03	−.04	−.07
	(.11)	(.10)	(.08)	(.10)	(.10)	(.08)
Residential wiremen	.25*	.28*	.27**	.24*	.29*	.28**
	(.11)	(.11)	(.09)	(.11)	(.11)	(.10)
VDVS/Communication worker	.15	.18*	.20*	.15	.16	.18**
	(.10)	(.09)	(.08)	(.09)	(.09)	(.07)
IBEW tenure	−.007*	−.007	−.006	−.009**	−.008*	−.007*
	(.003)	(.004)	(.004)	(.003)	(.003)	(.003)
Organization tenure	.007	.007	.006	.008	.007	.006
	(.004)	(.004)	(.004)	(.005)	(.005)	(.004)
Managerial practices		.04**	.02*			
		(.01)	(.01)			
Perceived supervisory treatment					.08**	.04
					(.02)	(.02)
Occupational commitment			.16**			.14**
			(.03)			(.03)
Union commitment			.22**			.29**
			(.07)			(.06)
Constant	4.26**	3.89**	2.19**	4.28**	3.81**	1.92**
	(.08)	(.13)	(.30)	(.07)	(.18)	(.29)
R^2	.10	.15	.33	.11	.16	.36
R^2 change	.10**	.05**	.18**	.11**	.05**	.20**
F	12.23**	12.77**	16.18***	14.82**	14.62**	17.96***
N	209			200		

Note: Initial sample is employed survey respondents, n=245; n reduced for missing responses.

Variable definitions in Table 3. Omitted category for organization size is small; omitted category for subfield is journeymen.

Numbers in parentheses are standard errors of the coefficients (clustered by organization).

*p<.05. **p<.01 ***p<.001

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In Model I, cooperative behavior was regressed on managerial practices in step 2 and union commitment and occupational commitment (attitudes) were added in step 3. With the addition of managerial practices in step 2, the change in the model's R^2 was significant and the variable was positive and significant. In step 3, with the addition of union commitment and occupational commitment, the model's R^2 increased significantly, the two attitudinal variables were significant and positive, and managerial practices remained significant.

In Model II, perceptions of supervisory treatment was added in step 2. The addition of supervisory treatment made a significant improvement in the R^2 of the model and the variable was positive and significant. In step 3, both union commitment and occupational commitment were positive and significant, increasing the model's R^2 significantly, but perceptions of supervisory treatment was no longer significant at the 5% level.

In step 3 in each of the models, both union commitment and occupational commitment were positive and significant. These results provide strong support for hypotheses 1 and 2 which suggested that respectively, occupational commitment and union commitment would each have a positive association with cooperative workplace behavior. The significance of these variables when also controlling for managerial practices and social relations, suggests that the relationships between these variables and cooperative behavior on the job are robust.

Each of the full models were significant (Model I: $F=16.18^{**}$, $p<.001$; Model II: $F=17.96^{**}$, $p<.001$). The models explain 33%, 36% of the variation in cooperative workplace behavior, respectively. Notably, whereas managerial practices and social relations explained only 5% of the variation in the dependent variable, the commitment variables explained about 18%–20%. Overall, the quantitative results suggest that while managerial practices and the social relations of the workplace (workers' perceptions of treatment by supervisors) were modestly associated with worker behavior on the job, attitudes (union commitment and occupational commitment) had a stronger quantitative relationship with workers' reports of cooperative behaviors.

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Discussion

Using a multi-methods approach, this study examined how rank and file members of one Local of the IBEW responded to its union leadership's call for cooperation, and the factors that contributed to their cooperative behavior. Cooperation was defined as workers complying with their in-role workplace responsibilities. The results indicate that workers heeded the union leadership's call. For example, for the most part, workers agreed that they started work at the appointed time, cooperated with workers from the other trades that were present at a job site, and were attentive to the pace of their work. The quantitative analysis corroborates findings from the qualitative data; it indicates that workers' commitments towards their occupation and their union were strongly associated with their behavior on the job, even after accounting for supervisory treatment or managerial practices.

The finding that the electrical workers reported engaging in relatively high levels of cooperative behavior is striking in light of earlier research, including Hodson (2001), who found that craft workers displayed relatively high levels of resistance to management. To understand union workers' cooperation with management, we need to look at the role the union has been playing. The leaders of the IBEW and NECA steadfastly worked on transforming a historically adversarial relationship into one of greater cooperation and trust. They spent time and resources conveying the message of cooperation to the rank and file membership, including the video presentation by IBEW president Edwin Hill in 2005 and member training.

Indeed, what makes this study distinct from other studies that have included a union presence in explaining worker behavior (e.g. Roscigno and Hodson 2004; Rubin 1986) is that it explicitly considers the union's current ideological position or agenda for working with management. In other related work, Vallas (2006) mentioned the general trend of the labor relations climate in the plants he examined, e.g. contentious or moving from contention to cooperation, but he did not discuss how the labor-management relationship influenced the dynamics in the plants he observed. In addition, these prior studies did not account for members' commitment to the union and therefore did not consider the members' willingness to follow the union leadership's agenda. The results of this study suggest these factors cannot be overlooked. It appears that when the union is encouraging cooperation with management and union commitment is high, workers tend to conform to the union agenda and cooperate with management, even in the face of personal reservations.

Interestingly, similar to Hodson's (2001) finding that craft workers scored highly in terms of pride in work, this study found that the electrical workers surveyed were highly committed to their occupation. Furthermore, occupational commitment had a significant effect on cooperative workplace behavior. This is an important finding given that few studies have examined the link between occupational commitment and behavior on the job (Cohen 2003). However, it is important to recognize the context of labor-management cooperation when considering this relationship. It is conceivable that in more adversarial settings, workers with high occupational commitment could be torn between wanting to do quality work on the one hand and feeling unenthusiastic about wanting to work in ways that helped management or even wanting to engage in resistance. Consequently, more research is necessary in a variety of settings to examine the generalizability of the relationship between occupational commitment and workplace behavior.

Human Relations studies have long suggested that workers base their behavior on the job on supervisory treatment. However, the regression analyses indicated only weak support for this contention. By itself, perceived treatment by supervisors was a significant predictor of worker behavior but when workers' attitudes were included in the model, perceived treatment was no longer significant. Roscigno and Hodson (2004) raised the concern that most studies of employees' responses to supervisory treatment are confined to studies conducted at a single location and therefore it is difficult to determine whether social relations have an independent effect apart from organization-specific characteristics. Given the electrical workers in this study were employed across 61 organizations of varying sizes, we have some evidence that relations with supervisors have an independent, though relatively weak effect on worker behavior. However, this finding should be further investigated in future studies by controlling for organization-level characteristics other than size.

Social identity theory (SIT) could help us understand the relative influence of attitudes and social relations. According to SIT, people categorize themselves and others into social categories and identify with those individuals who are in the same categories as themselves (their ingroup, such as fellow union members) and unfavorably evaluate those who are not in their social groupings (outgroups) (Ashforth and Mael 1989; Tajfel and Turner 1986). Furthermore, they may also adopt the norms and values of their ingroup. Given the union and occupational commitments of these workers, they most likely identified with their union leaders and with their co-workers,

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who like themselves, are union members and members of the same occupational community (electrical workers). Since the union supported cooperation with management, their high levels of commitment, acting as a proxy for identification, may have influenced their cooperative behavior on the job.

To sum up, for the group of unionized electrical workers studied here, their attitudes toward the union and their occupation and the union leadership's position toward cooperation with management facilitated cooperative behavior on the job. High levels of union commitment and occupational commitment helped members overcome some of their skepticism about management's sincerity about cooperation (as revealed in the interviews), and moved them to consent to a renegotiated effort bargain.

Future Directions

In this study we focused on the IBEW, and specifically, on how one Local responded to a call for cooperation from union leadership. Future research should examine the generalizability of these findings to other groups that are mobilizing worker cooperation through workplace behavior, both within the construction trades but also in other fields as well. In particular, we need to examine the role of other unions. How are they encouraging cooperation? Are rank and file members following union leadership's agenda? While this study identifies a significant association between union commitment and workplace behaviors, additional research should confirm this relationship in other contexts, considering both the nature of the union's agenda and members' commitment to the union in understanding worker behavior. Further, from a methodological standpoint, there remains the challenge of firmly establishing causality between attitudes and workers' cooperative behavior. Future quantitative analysis using panel data on union members before and after a "call" for cooperation would better clarify the relationship.

In addition, in future work, it would be useful to examine a broader spectrum of worker behaviors, including the relatively more serious forms of worker resistance (e.g. sabotage and theft) and citizenship behaviors. In a tough business environment, workers could choose to exert extra effort on the job in order to minimize job insecurity. Alternatively, it is conceivable that as employers face increasing competitive pressure, workers may feel more stressed and take their resentment out on the organization to a greater extent than in less turbulent times. Although keeping to prescribed times for lunch and breaks and concern for pace of work as assessed in this study indicates relatively low levels of work avoidance, future research should include measures of a wider array of resistance behaviors. In the context of dealing with increased competition, what would strong resistance and citizenship behavior look like and who is engaging in it?

Social relations were assessed by looking only at the relationship between workers and those with more authority. However, social relations at work can also include relationships between coworkers who may influence one's behavior on the job (e.g. Barker 1993). Future work that examines cooperation with management via in-role behavior on the job should expand the way in which social relations are conceptualized and measured to include coworker relationships.

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Finally, what remains an open but critical question is whether cooperation will achieve the stated goal of staving off nonunion competitors. The next step in this research agenda is to establish whether and the extent to which this type of cooperation—workers' meeting their in-role responsibilities—can improve firms' performance, help the bottom line, and reverse or slow competition from non-union firms.

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