ABSTRACT

In an effort to respond to fluctuations in demand, increase their flexibility, and lower payroll costs, many organizations increasingly hire nonstandard workers. Although this may help organizations save money in some areas, the reduction in expenses may be accompanied by an increase in other, often overlooked, costs. This dissertation is the first to provide a large-scale, multi-level examination of the connection between the use of nonstandard workers and social outcomes such as hostile behaviors, relations between employees and management, and experiences of sexual harassment. It also provides an examination of organizational demography’s ability to explain outcomes related to the use of nonstandard workers. Previous studies have tended to be qualitative or only examine one type of nonstandard worker. Existing quantitative studies tend to be based on non-representative samples. Further, few are able to match establishment and individual-level findings to examine which workers are more likely affected by establishment-level outcomes. Finally, most previous research has focused on practical rather than theoretical contributions. Using matched data from the 2002 General Social Survey (GSS) and the National Organizations Survey (NOS), I found that establishments with nonstandard workers have greater incidents of hostile behaviors, poorer employee-management relations, and more instances of sexual harassment than organizations without nonstandard workers. I also found support that these outcomes are affected by the proportion of nonstandard workers in an establishment, supporting arguments made by tokenism, as well as by numbers and recent changes in the use of nonstandard workers. Different types of workers have different effects on these outcomes. Nevertheless, the establishment-level results do not indicate that nonstandard workers are the ones affected by the outcomes, as individual-level data are needed to examine this claim. Individual-level findings indicate that nonstandard workers are not necessarily the targets of hostility and sexual harassment. Finally, standard workers report poorer relations with management than do nonstandard workers. I end with implications for theory, organizations and for future research.

INDEX WORDS: Nonstandard work, work relations, hostility, sexual harassment, organizational demography, tokenism, National Organizations Survey
ORGANIZATIONAL DEMOGRAPHY AND GROUP RELATIONS: HOW AND WHY
NONSTANDARD WORKERS AFFECT HOSTILITY, WORKER-MANAGEMENT
RELATIONS, AND SEXUAL HARASSMENT IN THE WORKPLACE

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For Sofoclis, Chryso, and Giagia “Daskala”
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CHAPTER 1

INTRODUCTION

A predictable 40 hour work week, a pension plan, and maybe even a gold watch; these were things that many U.S. workers came to expect from their employers in the latter half of the 20th century. More precisely, many workers had standard employment arrangements that offered fixed schedules and the mutual expectation of continued employment in exchange for monetary compensation provided by the employer requesting the labor (Kalleberg, Reskin, and Hudson 2000). The work was usually full-time and performed under the employer's control and at the employer’s place of business. These types of employment arrangements, however, have become less and less common.

Today, in an effort to meet fluctuations in demand, increase their flexibility, and lower payroll costs, many organizations hire nonstandard workers, such as temporary, on-call and contract workers (Caudron 1994; Cohany 1996; Kalleberg 2000; Kalleberg et al. 2000; Houseman, Kalleberg, and Erickcek 2003; Golden and Appelbaum 1992). In contrast to standard work arrangements, nonstandard work arrangements lack regular, full-time schedules or permanent employment relationships, and nonstandard workers may be employed by a different organization than the one in which their work is performed (Wiens-Tuers and Hill 2002). Research suggests that a little more than a third of all U.S. workers have nonstandard work arrangements (Belous 1989; Krausz and Bidermann 2000) and over 90 percent of U.S. organizations are using some type of nonstandard workers (von Hippel et al. 1997).
Nonstandard work arrangements, however, may be a double-edged sword for organizations. While the use of nonstandard workers is generally thought to increase an organization’s flexibility and lower several costs, such as health insurance, selection, recruiting, and training costs, other costs may be overlooked when deciding to utilize nonstandard workers. Some research suggests that nonstandard workers may be less committed and less reliable than standard workers (Hunter and MacInnes 1991), have higher error rates and lower productivity rates (Caudron 1994), and often require more training and supervision than standard workers (Geary 1992).

In this dissertation, I examine how using nonstandard workers may lead to new costs for organizations and workers through its effect on social relations in the workplace. In particular, I provide the first large-scale examination of how using nonstandard workers influences hostile behaviors, relations between employees and management, and experiences of sexual harassment. Specifically, I consider the extent to which organizations use on-call workers, temporary workers, including direct-hire temporaries and temporary agency workers, contract workers, and independent contractors. I also examine the conditions under which the use of nonstandard workers leads to hostile and poor social interactions and who is affected by them. Due to their temporary nature and status as outsiders, nonstandard workers are typically excluded from informal social networks (Rogers 2000; Allan and Sienko 1998; Chattopadhyay and George 2001). The use of nonstandard workers may therefore disrupt the sense of community and stability and weaken organizational communication (Pearce 1993). Strong ties between employees and managers also help facilitate organizational commitment. Nonstandard workers who recognize their marginalized role in organizations typically have little loyalty to their client organization (Rogers 1995) and may become resentful towards them (Feldman, Doerpinghaus,
and Turnley 1994). The (typically) short duration of their work is likely to exacerbate these feelings as they are less likely to establish strong social ties with permanent workers.

Case studies have shown that the use of a nonstandard workforce can lead to costs in the form of poorer relations among workers and supervisors. For example, the use of nonstandard workers can lower the trust and commitment of standard workers towards their organization (Pearce 1993; Ang and Slaughter 2001; Olsen 2003), and that relations between managers and workers can suffer as well (Broschak and Davis-Blake 2006). Qualitative studies have also found that the presence of nonstandard workers can lead to tension between standard and nonstandard employees (e.g. Geary 1992) and that when nonstandard workers are included in work groups, standard workers are less likely to exhibit helping behaviors (Broschak and Davis-Blake 2006) and less likely to participate in extra-role behaviors (Pearce 1993). Such tension can lead to animosity among group members, decreased satisfaction, and limited knowledge sharing among workers (Rahim 2001).

In fact, the use of nonstandard workers can also lead to hostile relations, rather than just relations of reduced quality. For example, Geary (1992) found that status divisions between standard and nonstandard workers created animosity between the workers. Research suggests that good coworker relations are associated with positive relations with management as well (Hodson 1997). Managers who fail to consider these social aspects of using nonstandard workers may not make the best decisions when deciding whether to use nonstandard workers, as they are overlooking a potential cost.

While there has been research examining how nonstandard work arrangements influence organizations and individuals in terms of involvement, loyalty, and psychological contract violations (Pearce 1993; Broschak and Davis-Blake 2006; George 2003), relatively few
quantitative studies have examined how they influence relations between workers and management or levels of harassment in the workplace. Studies examining the experience of nonstandard workers and the relations they have with regular employees, have tended to be qualitative, and examine one establishment or one type of nonstandard worker used in an establishment (e.g. Rogers 1995; Garsten 1999; Ang and Slaughter 2001; Barley and Kunda 2001). Consequently, one cannot be certain that these experiences are representative of all organizations, or all types of nonstandard workers. There have been some quantitative studies examining the experiences and attitudes of nonstandard workers (e.g. Pearce 1993; Feldman et al. 1994; Kalleberg et al. 2000; DiNatale 2001; Marler, Barringer, and Milkovich 2002), but again, many have examined just one or two establishments, rather than a national probability sample of establishments, or have used relatively simple statistical analyses (for an exception see Davis-Blake, Broschak, and George 2003). Furthermore, studies conducted at the organizational level do not often include individual-level analyses to examine which types of workers are most likely affected by the organizational-level outcomes.

Even studies that have focused their analyses on individual workers have often examined the experience of nonstandard workers without considering how standard workers are affected or vice-versa, making it difficult to determine whether these experiences significantly differ from each other. Although there are separate literatures for each type of nonstandard worker, it is also important to draw connections by examining how each type of worker differs from or resembles standard as well as other types of nonstandard workers. For example, nonstandard workers differ from each other in their social status, the duration of their employment, and their degree of supervision (Kalleberg et al. 2000), and they reflect different levels of externalization (Ashford,
George, and Blatt 2007). As a result, different types of nonstandard workers may have different relationships with standard employees.

Finally, few studies use a theoretical framework, as many focus on practical contributions. For example, there is much research on the prevalence of nonstandard employment, the demographics of nonstandard workers, and the reasons that organizations have come to rely on them (e.g. Cohany 1996; Kalleberg 2000; Kalleberg, Reynolds, and Marsden 2003). Few authors, however, have identified theoretical perspectives that might help explain why standard and nonstandard workers experience different (or similar) outcomes, and those that do seldom test for the moderating and mediating mechanisms that are proposed by the theory or attempt to extend the theory. Moreover, theories regarding workers as well as organizations have often dealt with a permanent workforce and do not account for contexts involving temporary and other nonstandard workers.

My study addresses these limitations. Motivated by the findings of qualitative research, I use quantitative methodology and a nationally representative sample of U.S. workers and their employing establishments to examine negative social interactions. I specifically examine how the use of nonstandard workers affects hostile behaviors, employee-management relations, and instances of sexual harassment. Using multilevel data allows me to examine establishment-wide ramifications of using nonstandard work arrangements as well as how organizational context affects the experiences of nonstandard workers themselves. Rather than making an ecological fallacy by simply assuming that outcomes linked to the use of nonstandard workers at the establishment level indicate that nonstandard workers must be the victims of these behaviors, I am able to use the matched data to examine whether this claim is in fact true. My research also serves as a context for developing new theoretical perspectives on nonstandard work.
Specifically, I examine whether organizational demography, which is typically applied to gender and racial differences, holds when it is applied to nonstandard workers or to specific types of interactions. Finally, while some studies have examined relations between workers and management, mine is one of the first to examine conflict outcomes, such as sexual harassment, on a national level.

I organize my discussion into several chapters. Chapter 1 serves as an introduction to the dissertation. In Chapter 2, I provide an overview of existing research on nonstandard work arrangements and their effect on hostility, employee-management relations, and sexual harassment. In Chapter 3, I identify the theoretical perspective that I draw upon and develop my hypotheses. I also include a discussion of several factors that are thought to moderate the effect of nonstandard workers on relations among workers and management. In Chapter 4, I describe the data I use, which come from the 2002 General Social Survey and 2002 National Organizations Survey. Chapter 5 consists of analyses conducted at the establishment level. It is organized into 4 subsections based on my key independent variables. First, I examine how using any type of nonstandard worker influences hostility, relations with management, and sexual harassment. Then, I examine whether different proportions, absolute numbers, or increases in the use of nonstandard workers from previous years have an effect on my outcomes. In the third and fourth subsections of chapter 5, I present separate analyses for the use of nonstandard workers in the core versus the periphery of an establishment and the use of different types of nonstandard workers. All of these outcomes are conducted at the establishment level. Chapter 6 focuses on outcomes at the individual level. Specifically, it examines outcomes of relations, hostility, and sexual harassment at the individual level and identifies the conditions that increase
one’s chances of experiencing these outcomes. Finally, Chapter 7 consists of a discussion of the theoretical and practical ramifications of my findings.
CHAPTER 2
LITERATURE REVIEW

Nonstandard work arrangements have experienced substantial growth over the last decades (Segal and Sullivan 1997). For instance, the number of temporary workers rose from 20,000 in the 1950s (Gannon 1984) to almost 3.5 million in 2000 (Ono and Zelenev 2003). A sizable group of organizations (around 23%) have over half their workforce composed of temporary workers (Houseman 1997) and most employers expect these numbers to increase. In fact, in recent years the growth in nonstandard work arrangements has been greater than the growth of standard arrangements (Befort 2003). Nonstandard workers are also becoming increasingly common across Canada, Europe, Japan, and Australia (Connelly and Gallagher 2004; Wooden and Warren 2004). Research shows that nonstandard workers are no longer hired to perform unskilled tasks (Appelbaum 1987). In fact, many of them are professionals, such as engineers, nurses, and accountants.

This growth in the use of nonstandard employment relationships reflects the cost savings that they are expected to generate. When viewed through the lens of economic perspectives such as transaction cost economics (TCE), for instance, the use of nonstandard workers seems quite appealing. TCE deals with the managerial issue of choosing between markets and hierarchies to structure economic activities (Williamson 1981). When obtaining materials and services, managers have to decide whether to purchase what they need on the market, or produce what they need inside their organization. This choice is made rationally using calculations of transaction costs, so that the option with the lowest transaction costs is the one chosen for its
greater efficiency (Williamson 1981). Nonstandard employment relationships allow managers to approach staffing issues in a similar way. On one hand, they can hire regular, full-time employees, who often complete establishment-specific training and remain at the same establishment for relatively long periods of time. On the other hand, they can rely on the market to provide temporaries, contractors, and other workers with nonstandard employment arrangements who arrive ready to work and stay for a predetermined and limited period of time. As with other make or buy decisions, the best employment arrangement will depend on the frequency, uncertainty, and asset specificity of the transaction (Williamson 1981). It will also depend on three types of transaction costs that accompany these economic activities: search and information costs, bargaining costs, and enforcement or policing costs. As these costs increase for activities purchased on the open market, it may become more efficient for an organization to vertically integrate them.

The use of nonstandard workers lowers costs and increases flexibility in dealing with changing market conditions in several ways. First, it lowers many administrative costs for firms, such as costs for health insurance, unemployment insurance and pension plans (Davis-Blake and Uzzi 1993), as well as selection, recruiting, and training costs. Belous (1989) argues that some types of nonstandard workers, such as independent contractors are able to manage their own work, thus eliminating the need for day-to-day supervision. Second, the use of some types of nonstandard employees allows organizations to access valuable and specialized skills that are only needed for short periods of time without having to make a fixed investment (Belous 1989). In addition, organizations with highly variable employment needs can manage their dependence on the available supply of employees by relying on nonstandard workers, rather than by hiring and firing workers as their needs change (Pfeffer and Salancik 1978). Nonstandard workers can
be used and let go without damaging the organization's reputation for offering stable employment, since nonstandard workers are hired with the understanding that they can be let go when they are no longer needed, and without incurring the risk of lawsuits stemming from claims of wrongful discharge. Past research has suggested that firms that are either growing or declining are more likely to use nonstandard workers than those with stable employment levels (Mangum, Mayall, and Nelson 1985). Finally, nonstandard workers may also be used as a way to manage their relations with permanent employees, by reminding them that other labor sources are available and by limiting the power of unions.

Nevertheless, there is also evidence that the use of nonstandard workers leads to additional costs. For example, some authors have argued that nonstandard workers have high error rates and lower productivity rates (Caudron 1994). Nonstandard workers may also require more training and supervision to make sure that the quality of work is up to par. Some authors also argue that nonstandard workers may be less committed and less reliable than standard workers (Hunter and MacInnes 1991). Finally, they can have an effect on hostility within the workplace and a negative impact on relations among workers and between workers and management.

Several qualitative and small sample studies find that the presence of nonstandard workers has a negative effect on attitudes and behaviors among workers. In a quantitative study of three organizations, Chattopadhyay and George (2001) found that trust and interpersonal attraction between workers decreased as the number of temporary workers in work groups increased. Further, using qualitative methods, Geary (1992) examined the presence of temporary workers in three electronics firms and found that their presence led to tension and animosity between permanent and temporary workers. Finally, in a study of a multinational financial
services firm, Broschak and Davis-Blake (2006) found that greater mixing of standard and temporary workers resulted in a worsening of interpersonal relationships among workers. Many establishment-level studies however do not contain information about who is most affected by the tension and animosity.

It would be easy to make the ecological fallacy and assume that, since the use of nonstandard workers leads to animosity within the workplace, that it is the nonstandard workers who suffer and are the victims of the animosity. However, without empirical data that examines the experiences of individual workers, it would be incorrect to make this assumption. Therefore, research that includes data on both establishment and individual-level outcomes is needed to examine which workers are affected by these organizational-level outcomes. In other words, they do not tell the whole story by not being able to look at the experiences of the individuals in the organization.

Individual-level research on temporary and contract workers reveals negative treatment towards nonstandard workers by their coworkers (Geary 1992; Smith 1997; Hudson 2001). For example, a mixed-methods study using a sample of temporary agency workers in the Southeast found that many temps felt they were not treated with respect, were looked down upon, and ended up feeling inferior to other workers (Feldman et al. 1994). Qualitative research found that some low-status workers, such as temporary workers, are particularly susceptible to hostile relations, workplace abuse, objectification and sexual harassment by standard employees (Rogers 1995). As a result, many authors argue that nonstandard workers sometimes feel isolated and do not identify with the organization even if they work on-site with other workers (Allan and Sienko 1998; Chattopadhyay and George 2001).
The use of nonstandard workers also affects standard workers and their relationship with their supervisors. Qualitative and small-scale studies show that negative attitudes towards management and the organization are related to the use of nonstandard workers (Geary 1992; Pearce 1993; Chattopadhyay and George 2001; Davis-Blake et al. 2003). For example, Pearce (1993) found that permanent workers who worked with contract workers reported lower trust in managers than those who only had permanent coworkers, and Broschak and Davis-Blake (2006) found that the presence of nonstandard workers led to poorer relations between managers and workers. In an earlier study they found lower levels of loyalty among the standard workforce and an increased interest in leaving the organization (Davis-Blake et al. 2003).

Some authors argue that there is a positive correlation between good coworker relations among standard workers and good relations with management (e.g. Hodson 1997). Nonstandard workers’ relations with their coworkers are also positively associated with their relations with management (e.g. George and Chattopadhyay 2005). In other words, positive vertical relations in the workplace may depend, to some degree, on positive coworker relations. This may be important because it suggests that even if organizational practices exclude nonstandard workers, positive interactions with other workers can make nonstandard workers feel more attached to management as well.

Besides affecting relationships, the presence of nonstandard workers also seems to affect the work-related behavior of standard workers. Researchers have found that when nonstandard workers are included in their work group, standard workers are less likely to exhibit helping behaviors (Broschak and Davis-Blake 2006) and less likely to participate in extra-role behaviors, such as pitching in to meet deadlines (Pearce 1993). Finally, Davis-Blake et al. (2003) found
that standard workers are more likely to unionize when nonstandard workers are added to their group, perhaps as a response to the perceived threat of their job security.

Individual-level studies on the use of nonstandard workers have led to great observations on the experiences of nonstandard workers. Nevertheless many do not examine the experiences of standard workers, or, when they do, they are often not compared to those of nonstandard workers, so it would be incorrect to claim that the experiences of nonstandard workers are significantly worse than those of standard workers in the establishments studied. In other words, they do not compare the experiences of both types of workers within a single establishment. As a result, it is often difficult to compare whether one group fares worse than the other. Although, one might easily assume that nonstandard workers fare worse than standard workers, it is possible that standard workers are just as likely to be mistreated in an organization that uses nonstandard work arrangements.

Further, while research examining the effects of the use of nonstandard workers on conflict and relations within the workplace has provided a wealth of information, most studies are not representative. For example, Pearce (1993) examined a large aerospace company in a setting where the use of contract workers was considered commonplace. Geary (1992) conducted qualitative research on three firms in Ireland. Broschak and Davis-Blake (2006) examined two locations of a single firm. Barnett and Miner (1992) looked at a large Fortune 500 company. Nevertheless, the insights gathered from these studies serve as an important guide in my examination of worker relations using a nationally representative sample of workers and organizations.

Several reasons have been presented for the negative attitudes among standard workers. The use of nonstandard workers may lead standard workers to question the security of their own
jobs. At the same time, they may feel they have to work overtime to protect their jobs (Geary 1992). Several authors have shown that permanent workers often do not like the use of nonstandard workers, especially if they believe that their employer would like to replace them with nonstandard workers (Pearce 1993; Porter 1995; Ward 2001). Nonstandard workers are often used as a way to recruit and screen workers for permanent jobs or as a substitute for hiring new workers, which puts them in competition with standard workers. For example, Smith (1997) argues that organizations often use temporary workers to send a signal to standard workers that their own jobs are tenuous. In the organization she studied, she found that the competition was heightened when temporary workers were able to convert to permanent status and when they were performing very similar tasks to those performed by standard employees. Davis-Blake and Uzzi (1993) also found that management sometimes uses nonstandard workers to prevent the standard workforce from unionizing.

Another reason for the negative attitudes of standard workers may be that their promotional opportunities are affected by the use of nonstandard workers. One study found that the presence of temporary workers reduced advancement opportunities and slowed the mobility of lower-level permanent employees, although it quickened the mobility of high-level permanent employees (Barnett and Miner 1992). Geary (1992) also found that it was difficult for standard workers to receive promotions due to the fact that management spent much time managing conflicts between standard and temporary workers and, hence, less time on giving informal performance feedback to standard employees. Broschak and Davis-Blake (2006) found employee attitudes were more negative for workers whose jobs were below the mean job grade, possibly due to their perception of reduced mobility opportunities.
Regular employees might also be resentful at having nonstandard workers in their work group because this often places additional (and uncompensated) demands on them. For example, some studies show that workers spent more time on administrative tasks than on meaningful work when there were temporary workers present (George 2003). They were given additional supervisory demands (Geary 1992) while also being held responsible for mistakes made by nonstandard workers (Pearce 1993; Smith 1994). In an effort to control nonstandard workers, organizations often give them tasks with less complexity (Davis-Blake and Uzzi 1993), and that can lead to problems. Ang and Slaughter (2001) found that permanent workers felt resentment because contractors were assigned simple tasks that could be easily supervised, leaving more complex tasks to them. Other researchers also found that the workload assigned to core employees was affected by the use of nonstandard workers. For example, Twiname et al. (2003) found that the use of nonstandard workers led core employees to work extended hours at no additional pay, partly in an attempt to maintain their core status.

There are also reasons for relations between standard workers and management to suffer as a result of an organization using nonstandard workers. If standard workers believe that their organization is exploiting the nonstandard workers or treating them unfairly, they may perceive the organization to be untrustworthy (Connelly 2006; George 2003). Externalization could also be perceived as an indicator of an organization’s lack of commitment to its standard workers (George 2003). Research has shown that the use of nonstandard workers does indeed often lower standard employees’ trust and commitment to their organization, as well as their perceived organizational support (Ang and Slaughter 2001; Olsen 2003). For example, Pearce (1993) found that standard employees who worked with contractors reported lower levels of trust in their organization than employees who did not work alongside contractors. Davis-Blake et al.
(2003) found that the use of temporary workers decreased loyalty and job satisfaction among standard employees.

Poor relations and low levels of trust in management can also develop among standard workers who perceive their psychological contract to be violated (George 2003). If management uses nonstandard workers to thwart employees' interest in joining a union, or to send a signal that employees could easily be replaced, standard workers may feel that their psychological contract has been violated. Further, if the use of nonstandard workers creates uncompensated demands on the standard workforce, they may also experience these additional demands as a violation of their psychological contract (Davis-Blake et al. 2003). The perception of a contract violation is stronger for workers who initially had a stronger, more positive psychological contract (George 2003). It is important to note that the way a worker perceives the work relationship is a subjective process. For example, an adjunct professor who has worked at a university for twenty years may feel less temporary than a new hire on a tenure track, and may thus have greater expectations in terms of their psychological contract.

Finally, there are several potential reasons for the negative attitudes that nonstandard workers may have towards their coworkers and management. Many nonstandard workers feel that they are treated like objects, as having no name, or as being invisible to other workers and management. One temporary worker states, “I deeply resent that I am regarded as expendable by the entire system, that once I have completed the task at hand I will be discarded like a used condom” (Feldman et al. 1994:58). They may also resent the fact that permanent workers often dump undesirable work on them (Henson 1996). Finally, they may also dislike the asymmetrical power relationship they have with permanent workers, which leaves the door open for harassment. For example, Rogers (1995) found that when temporary workers reported being
sexually harassed by their supervisors, the complaints were often not addressed by the organization because the temporary workers were not its legal employees. They were not addressed by the temporary agency either, because the perpetrators were not employees of the agency, leaving temporary workers in a powerless position. Nonstandard workers may also be particularly upset with employers if they believe they were misled about permanent job prospects. Feldman et al., (1994) found that temporary workers claimed they were lied to about the possibility of a full-time job. Many temps who had worked on the same assignment for several months believed that the company would not hire them on a permanent basis to avoid paying benefits, making them resent the company.

In the following section, I introduce the theoretical framework that I use to examine how using nonstandard workers is connected to hostile behaviors and social relations in the workplace.
Organizational Demography

Organizational demography has often been used by researchers to examine the effects of diversity in the workplace. The central ideal behind this perspective is that individuals compare their own characteristics such as age, gender, race, and occupation to those of others and that the level of similarity they have with others is associated with positive attitudes and behaviors (Tsui and O'Reilly 1989). Organizational demographers often invoke two theoretical approaches when explaining how group composition can influence individual attitudes and behaviors, such as job satisfaction, commitment, and organizational citizenship behaviors: the similarity-attraction paradigm and the social categorization paradigm. I argue that these two processes can also help explain social relations outcomes associated with the use of nonstandard workers.

Similarity-attraction paradigm

Byrne’s (1971) similarity-attraction paradigm proposes that individuals are attracted to and feel positive toward those with whom they perceive a similarity. These similar salient characteristics can affect individuals’ attitudes and behaviors because they facilitate interaction among members. For example, Hinds, Carley, Krackhardt, and Wholey (2000) found that individuals preferred to work with others of the same race, while others have found that turnover was lower for women when there was a higher proportion of women at their own job level (Elvira and Cohen 2001). Turban, Dougherty, and Love-Stuart (1997) found that doctoral students and their advisors tended to be similar in race and gender. People who are dissimilar, in
contrast, may be disadvantaged because they are excluded from informal networks and lack access to mentoring and other information important for their career.

Social categorization paradigm

Like Byrne's similarity-attraction paradigm, the social categorization paradigm argues that individuals define themselves along several characteristics and as members of groups (Tajfel and Turner 1979). While the similarity-attraction paradigm argues that individuals tend to like those who are similar to themselves, the social categorization paradigm suggests that individuals tend to define others as part of their in-group or out-group. They do so in an attempt to facilitate the ordering of their social environments, to reduce uncertainty, and to maintain a positive self-esteem. People identify and evaluate themselves, partly based on their group memberships (Messick and Mackie 1989), as groups provide individuals with a guide to appropriate perceptions, attitudes and behaviors, which in turn helps them develop a clear social identity (Mael and Ashforth 1992). When individuals interact with those whose characteristics are perceived to be similar, they feel a sense of security, as their beliefs are less likely to be challenged. Similar characteristics can include age, education, values, and organizational memberships. Research finds that homogeneous work groups tend to experience higher job satisfaction and lower turnover than heterogeneous groups (O'Reilly, Caldwell, and Barnett 1989), while dissimilar members are the least socially integrated into the group, have lower organizational commitment (Tsui, Egan, and O'Reilly 1992), and are most likely to exit (Jackson, Brett et al. 1991). Mueller et al. (1999) similarly found that white teachers who worked in contexts where their race was not dominant had reduced job satisfaction and school commitment.
Individuals who are similar are identified as the in-group, while those who differ on salient characteristics are stereotyped as the out-group (Hogg and Terry 2000). Tajfel and Turner argue that “these identifications are to a very large extent (inherently) relational and comparative: they define the individual as similar or different from, as ‘better’ or ‘worse’ than, members of other groups” (1979: 40). This need to identity people into in-groups and out-groups is part of the process of simplifying the complexity of social processes. The out-group helps form the identity of individuals by informing them of who they are not. In order to achieve a positive sense of self, individuals view themselves and other members of their in-group favorably relative to members of the out-group, who are seen as less trustworthy and cooperative, even if the two groups are created on the basis of arbitrary criteria (Brewer 1979). Stephan and Stephan (1985: 163) argue that “people who regard themselves as superior experience anxiety concerning interaction with others who are regarded as inferior.” As a result, they prefer interacting with members of their own group (Stephan 1978) and may avoid contact with the out-group, something which does little to change the perceptions of dissimilarity of the out-group, and which may have negative consequences on group processes.

Besides affecting attitudes, these dynamics also prompt in-group members to act positively towards each other and to treat members of the out-group less favorably. Social identity theory and the demographic composition of an organization have thus been argued to affect people’s experiences in the workplace, with out-group members being more likely to experience unfavorable outcomes. Pelled (1996), for example, examined dissimilarity along several characteristics and found that gender and tenure dissimilarity were positively related to perceived workgroup conflict. Age and tenure dissimilarity are also associated with less frequent communication with other group members (Zenger and Lawrence 1989). Chattopadhyay (1999)
also found that white males were negatively influenced when they were the racial and gender minority in work groups.

Characteristics that are salient in a particular context are the ones likely to be used in making distinctions between in-group and out-group members. In other words, individuals have several group memberships and the context determines which identity is the most salient, which in turn affects inter-group relations (Ashforth and Mael 1989). For example, in a group of all women, gender is not very likely to be salient, but race may become more noticeable. It is often the dominant group that determines which differences are salient (Sampson 1999), usually in a way that maximizes inter-group distinctiveness, secures the dominant members’ positive sense of self, and justifies their attitudes toward others (Kramer 1991).

Overall, this theoretical perspective suggests that dissimilarity along a visible or salient characteristic is associated with negative work-related attitudes and behaviors and creates opportunities for conflict and discrimination. This is an important issue since conflict can lead to animosity among group members, poor relations, decreased satisfaction, and limited knowledge sharing (Rahim 2001; Tsui and O'Reilly 1989).

**Organizational Demography and Nonstandard Workers**

While research on organizational demography has focused on similarity in terms of characteristics such as gender and race, there has been little research on characteristics that are created in the workplace, such as employment arrangements. Furthermore, research on organizational demography has typically examined job satisfaction, organizational commitment, and turnover (Riordan and McFarlane Shore 1997), but there has been little representative
research on how organizational demography affects worker-management relations, hostile
behaviors, or sexual harassment.

Organizational demography provides a good theoretical framework for examining how combining standard and nonstandard workers in a workplace influences social relations (Tajfel and Turner 1986). As described above, the social categorization paradigm argues that individuals place themselves and others into in-groups and out-groups, and they do so by using salient contextual criteria. The salience of employment status may be minimal or unnoticed until some external event reveals its importance (e.g., when the organization brings in contractors to work on a project). Prior to the introduction of contractors or temporary workers in an employment setting, employees may use other characteristics to define their in-group and out-group, but once nonstandard workers come along, a worker’s employment arrangement could become one of the defining characteristics of who is part of the in-group.

There are several reasons to expect that nonstandard workers will be seen as outsiders within an organization. Rogers (2000) argues that temporary workers are often physically separated from permanent employees and from other temporary workers. They also don’t stay at an organization long enough to establish relationships with other workers. Furthermore, regular employees and exclusionary organizational policies constantly remind nonstandard workers of their outsider status. For example, referring to temporary workers as “the temp” rather than by their name or avoiding talking to them altogether adds to their social exclusion (Rogers 2000). Assigning nonstandard workers to peripheral tasks and requiring them to wear special badges or uniforms can also add to their sense of alienation. The idea that nonstandard workers are often treated as a bundle of skills rather than individuals also makes it more difficult for them to identify with the organization (Feldman et al. 1994). Finally, Hudson (2001) argues that the
tasks some nonstandard workers do are discredited, not for their quality, but because of the status of the workers who are doing them.

There is evidence to suggest that workers are indeed assigned in-group/out-group status based on their employment arrangement and that being a nonstandard worker is a salient category that affects outcomes as suggested by similarity-attraction and self-categorization theories. Nonstandard workers often face some difficulty defining their identity as they are both “betwixt and between” social structures (Garsten 1999). They are both part of the organization, even for a short duration, yet outsiders at the same time. Indeed, many nonstandard workers report feeling like outsiders. They feel isolated and do not identify or feel loyal to the organization even if they work on-site with other workers (Allan and Sienko 1998; McLean Parks, Kidder, and Gallagher 1998; Chattopadhyay and George 2001). Their outsider status makes it more difficult for nonstandard workers to establish relationships with their employer and coworkers than it is for standard employees (Beard and Edwards 1995). These findings have been confirmed for highly-skilled contractors (Kunda, Barley, and Evans 2002) as well as low-level temporary employees (Rogers 1995). For example, Kunda et al. find that while contractors choose their employment arrangement because they want to get away from “the politics, incompetence and inequity” of the workplace, they often find themselves cut off from the social life of the workplace as well (Kunda et al. 2002: 241).

The out-group status of nonstandard workers often has negative consequences. Research suggests that some types of nonstandard workers report high levels of anxiety over the threat of discrimination and victimization (Forde and Slater 2006). Geary (1992) suggests that poor relations between temporary and standard workers lead to the fear of victimization among
temporary employees.\textsuperscript{1} Studies on temporary and contract workers reveal negative treatment of nonstandard workers by on-site workers (Geary 1992; Smith 1997; Hudson 2001). Many temps, for example, believe they are not treated with respect, are looked down upon, and end up feeling inferior (Feldman et al. 1994). Rogers and Henson (1997) argue that due to their low status and the transitory nature of their work, temporary workers are particularly susceptible to workplace abuse, objectification and sexual harassment. Working alongside permanent workers may amplify their distinctiveness; but being kept separate from each other may also justify opinions regarding in-group and out-group status. Henson and Rogers (2001) also highlight the experience of male temporaries who face challenges to their sense of masculinity and harassment as a result of failing to live up to the ideals of hegemonic masculinity. By defining nonstandard workers as inferior, workers and organizations alike reinforce their subordinate status.

Still, different types of nonstandard workers may be more vulnerable to being assigned out-group status. For example, contractors who are former employees of the client organization may be able to maintain the in-group status they enjoyed while they were employees and be more likely to be accepted among their former colleagues. Among contractors and highly-skilled employees whose identity is tied to their occupation or profession, rather than their organization, the out-group effect may also be somewhat mitigated. Standard workers with strong occupational cultures, such as engineers, may thus perceive the nonstandard workers as part of their in-group. On the other hand, independent contractors who typically receive little supervision and have control over their schedules may be especially likely to be perceived as distinctive, compared to permanent employees. Finally, short-term temporary workers, who are

\textsuperscript{1} This fear is likely to be heightened if the temp agency workers believe they will be discriminated against by their own agency by refusing assignments if they come to be perceived as troublemakers (Forde and Slater, 2006).
often assigned peripheral tasks and excluded from many functions, have a great likelihood of feeling like outsiders as well as being perceived as outsiders by their coworkers.

**How the Use of Nonstandard Workers Affects Organizational Outcomes**

**Hostile Behavior**

Hostility and conflict within organizations has been a topic of interest for several industrial sociologists (e.g. Perrow, 1986, Van Maanen, 1977; Morrill, 1995). General workplace harassment involves expressions of hostility and disrespect and can include low level conflict behaviors such as giving dirty looks and making belittling statements but also more intense behaviors including verbal threats and even violence (Skarlicki and Kulik 2005; Ehrenreich 1999). Bullying, a subcategory of general workplace harassment (Hodson 2001; Schmidt and Roscigno 2005) is defined as “repeated attempts to torment, wear down, or frustrate another person; it is treatment that provokes, pressures, intimidates, or otherwise causes discomfort” (Einarsen, 2000, p. 382). I label general harassing behaviors, such as bullying, written threats, and violence, as hostile behaviors. It should be noted that general workplace harassment does not include sexual harassment.

Studies suggests that between 10 – 20% of all workers are victims of hostile treatment (Einarsen et al. 2003) and suffer consequences that last long after the harassment occurs (Hodson 2001; Leymann & Gustafsson 1996). These hostile behaviors do not only affect workers; they also threaten organizational norms of civility (Ashforth 1994) and helps reify the formal and informal status hierarchies that exist (Lopez et al. 2009).

Research from qualitative and case studies shows that the use of nonstandard workers often leads to hostile relations in the workplace (e.g. Geary 1992). Theories regarding in-groups
and out-groups as outlined by organizational demography also support the idea that relations among coworkers are hostile. The hypotheses at the establishment level do not specify who the victims of such behaviors will be. In order to find out who is being harmed by these interactions, I later make hypotheses at the individual level. At the organizational level, I expect that:

Hypothesis 1a: The use of nonstandard workers in an establishment will be positively associated with hostile behaviors in the workplace.

Employee-Management Relations

As described earlier, past studies on nonstandard employment suggest that the use of nonstandard workers will also affect the relationships between standard workers and management. For example, Broschak and Davis-Blake (2006) find that heterogeneity in employment arrangements has negative effects on group members' reactions toward their supervisors. Standard workers may resent additional tasks being added to their workload by their supervisors or may begin to question their loyalty to management. Nonstandard workers may also be upset with management if they don’t feel valued or if they feel they were mislead about their job prospects. Furthermore employee-management relations may be jeopardized any time standard and nonstandard workers are in conflict because management is responsible for the use of nonstandard workers and the allocation of tasks. Therefore, I expect that hostility among coworkers will also lead to poor relations with management.

Hypothesis 1b: The use of nonstandard workers in an establishment will be positively associated with poor relations between workers and management.
Sexual Harassment

I also examine how using nonstandard workers influences sexual harassment. Scholars have used more than one definition of sexual harassment. For example, Welsh (1999) identifies two categories of sexual harassment; hostile environments and quid pro quo arrangements, which include threats and promises. Gruber (1992) argues that sexual harassment falls in three domains; verbal requests, verbal remarks, and nonverbal displays. Verbal requests can include sexual bribery or advances, verbal remarks include jokes and objectification, while nonverbal displays may range from distributing sexual materials which debase a gender to sexual assault. Finally, Lopez, Hodson, and Roscigno (2009) define sexual harassment as “behavior that violates, derogates, demeans, or humiliates an individual based on sex or gender” (p.5). Besides outcomes related to their well-being, victims of sexual harassment also report more negative attitudes towards organizations, lower satisfaction with work, lower productivity, and increased absenteeism (Crull, 1982; LaBand and Lentz 1998).

While these definitions underscore variation with regard to purpose or severity, research also suggests that workers also use different definitions of sexual harassment depending on their organizational context (Dellinger and Williams 2002). Organizational culture includes the behaviors, understandings, interpersonal dynamics and values shared by organizational members (Reskin and Padavic 1994; Trice 1993). It also refers to the norms surrounding sexual interactions in the workplace (Gherardi 1995; Hearn and Parkin 1987), so the organizational structure and culture have to be taken into account if one is to understand how workers define harassment.

Research has examined the process by which workers draw the line between what they consider consensual sexual behavior and sexual harassment (Williams, Giuffre, and Dellinger...
If some sexual behaviors are considered part of the job, workers are more likely to tolerate them (Adkins 1995). In other words, if the behaviors are institutionalized requirements of their occupation, workers are not very likely to label the behavior as sexual harassment. In a study on the tourism industry, Adkins (1995) found that women were required to participate in sexualized interactions with customers as part of their job. Nonetheless, even in sexualized jobs, workers make distinctions between behaviors they find acceptable and ones they find harassing (Williams 1997). Furthermore, even in cases where individuals seek out and even enjoy jobs that are highly sexualized, they still draw lines between pleasurable or acceptable, tolerable, and harassing sexual behaviors.

The timing of the behaviors is also a factor that comes into play when defining sexual harassment, so that experiences that do not transcend the work role are often not labeled as sexual harassment (Williams et al. 1999). These same behaviors would be labeled as harassment if they were to take place after work hours.

Even in a given context, the same behaviors may be perceived differently based on who is engaging in them. For example, Giuffre and Williams (1994) found that waiters and waitresses willingly engaged in sexual bantering with coworkers of the same background, but regarded the same behavior as sexual harassment if it came from coworkers of different race, class, or sexual orientation. Following this logic, standard workers might be especially likely to perceive the behaviors or nonstandard workers as harassment. Nonetheless, research suggests nonstandard workers are more likely to be the victims rather than the perpetrators of these types of behaviors.

Dellinger and Williams’ (2002) examine a group of workers at a heterosexual men’s pornographic magazine and a feminist magazine. At the pornographic magazine, employees
signed acknowledgments stating that they understood their work involved dealing with sexually explicit material, suggesting that those who did not tolerate this exposure were unlikely to be hired or were likely to leave on their own. While employed, workers were subjected to a sexualized work environment on a daily basis but rarely labeled it sexual harassment. They only felt they were being sexually harassed when the bantering crossed from business sex into personal sex. It is interesting to note that even discussing sex in the abstract could be interpreted as sexual harassment in a different organizational context.

The editors at the feminist magazine, in contrast, did not have a formal sexual harassment policy or perceive sexual harassment to be a problem in their all-women environment because they shared a feminist analysis that viewed unequal organizational power as the defining feature of sexual harassment. Unlike the pornographic magazine, editors at the feminist magazine often disclosed personal sexual information, leading to openness about sexuality described as the “dorm room” culture. This sexualized environment was nevertheless considered safe due to the all-women environment. If men had been involved, the comments would probably have been considered harassment by the editors.

All of these studies indicate that the organizational context influences the meaning and consequences of sexually harassing behavior. What may be regarded as sexual harassment in one context may be perceived as harmless in another. Some contexts even call for workers to specifically tolerate behaviors that might be deemed harassing in many contexts; in these cases the line between sexual harassment and consent is blurred. Dellinger and Williams’ (2002) study of workers at a heterosexual men’s pornographic magazine and a feminist magazine suggests that organizational ideology affects the workers’ definition of sexual harassment. The argument that the definition of sexual harassment varies by organizational context challenges sexual
harassment research that uses “objective” lists of behaviors to examine the prevalence of harassment (Williams 1997). Rather than an objective list of unacceptable sexual behavior, the meaning of sexual harassment depends on the cultural norms and structural features of an organization, as well as the characteristics of its workers.

Nonstandard work is often organized in a way that can leave nonstandard workers vulnerable to sexual harassment (Rogers and Henson 1997). Asymmetrical power relations and low status may increase the likelihood that nonstandard workers will be victims of harassment (Fiske and Glick 1995; Gutek 1985; MacKinnon 1979). For example, Rogers and Henson (1997) argue that temporary workers are particularly vulnerable as they typically hold the lowest rank in their office, are often not referred to by their name, or are treated as if they were pieces of furniture (Henson 1996). All of these characteristics increase their likelihood of being mistreated, including being sexually harassed.

Nonstandard workers also have limited opportunities to fight back in an environment that tolerates, and even fosters, harassment. Although temporary workers are told to report complaints to the agency, most choose not to for fear that they would be perceived as troublemakers and be denied future assignments (Rogers and Henson 1997). They may also choose not to report the behavior because their assignment (and harassment) is temporary, and they do not want to be seen as making a big deal out of “nothing.” Interestingly enough, the transitory nature of the assignment contributes to the harassment, as harassers are likely to go unpunished. As a result, most workers in Rogers and Henson’s study either put up with the harassment or left the assignment without reporting the harassment. Even when the behavior was reported, the agency was likely to discount it, especially since the agency’s interests are usually aligned with the clients’ interests. Although Rogers and Henson (1997) examine
temporary workers, there are characteristics that are similar in other nonstandard work arrangements that might put workers at risk for sexual harassment. Their out-group and typically low status make them likely victims for harassment. Therefore, I predict:

Hypothesis 1c: The use of nonstandard workers in an establishment will be positively associated with instances of sexual harassment.

*The Effect of the Proportion of Nonstandard Workers*

Although the theoretical perspectives underlying the hypotheses above suggest that the presence of nonstandard workers will influence social relations in the workplace, they may oversimplify things by failing to distinguish between more and less intensive uses of nonstandard workers. Indeed, a number of authors have argued that how workers are treated depends on their numbers. Group heterogeneity is an interesting workplace characteristic as there are two contradicting theoretical perspectives regarding its effect on relations between majority and minority group members (South et al. 1982). The first is Kanter’s (1977) theory of tokenism, which argues that members of a minority group suffer negative conditions and poor relations with members of the majority due to their small size. Her main prediction is that an increase in the size of the minority group will lead to a decrease in prejudice and an increase in positive intergroup relations (Kanter 1977; Cook 1979; Pettigrew 1986). The second perspective is Blalock’s theory of competition, which finds that an increase in minority group membership is perceived as a threat to the majority, and as such, leads to increased conflict and poorer group relations (Blalock 1967; South et al. 1982; Tsui et al. 1992).
Kanter’s Tokenism

Kanter’s (1977) research focuses on the effects of numerical proportions on work group life. Her work describes four group types based on how large the proportional size of the minority is.\(^2\) Uniform groups consist of people of the same category (e.g., an all-male group). Skewed groups are those with a proportion of minority group members of .15 or less. Minority group members of skewed groups are referred to as tokens. Laws (1975) defines the token as a member of an underrepresented group, who is operating on the turf of the dominant group. These token members are often treated as representatives of their category, as symbols rather than individuals. Tilted groups range from a proportion of .16 to .35 and face some of the same difficulties as members of skewed groups, but their pressures are less intense. Finally, balanced groups have approximately equal proportions of people from different social categories.

Kanter describes several phenomena that occur in skewed groups. The first is the visibility of tokens. Due to their small size, tokens are highly visible and are often considered representatives of their social category, and their actions have symbolic consequences for their group. The second phenomenon is the exaggeration of group differences. Dominant members reinforce the differences between themselves and the minority group and attempt to emphasize the commonalities of their own group. As a result, tokens become marginal and excluded from both social and work activities. This is similar to the arguments proposed by similarity-attraction and self-categorization perspectives. The third phenomenon is assimilation. As described above, tokens are often not seen as individuals but as representatives of their category. South et al. argue that “tokens’” attributes are distorted to conform to the dominant category’s preconceived

\(^2\) Minority is used to refer to a numerically underrepresented group in an organizational context and not necessarily to a dispossessed group.
stereotypes of the minority” (1982: 588). As a result, they typically end up playing roles in organizations that fit the stereotype of their group.

Overall, Kanter’s arguments suggest that the numerical rarity of tokens makes them vulnerable and less likely to be accepted than members of the larger group. According to Kanter, "organizations with a better balance of people would be more tolerant of the differences among them" (1977: 283). In other words, as groups become more balanced, the negative effects of being a token and the poor relations between minority and the majority group will be offset.

Kanter’s findings have been replicated in a number of different settings. Her predictions have been supported by studies of female corrections officers in male prisons (Jurik 1985), the first policewomen on patrol (Martin 1980), female coal miners (Hammond and Mahoney 1983), and female physicians (Floge and Merrill 1985). Her theory has also been supported with research on tokens in non-work environments. For example, Spangler, Gordon, and Pipkin (1978) found that female law students who attended a school with a small percentage of women faced more social isolation, performance pressures, and role entrapment than women who attended a school with a more balanced gender composition.

Although research has supported the notion of tokenism inside and outside the workplace, several critiques of the theory have been presented. One of the main critiques of tokenism is that the effects of tokenism are confounded with those of social status (Alexander and Thoits 1985). In other words, the effects of tokenism as described by Kanter may only hold for low-status tokens among high-status majority members. Indeed, some research on male tokens (Williams 1992) suggests that they do not face the same pressures and negative outcomes characteristic of female tokens. In fact, in some settings, not only do men avoid the negative consequences faced by token women, their advancement opportunities are enhanced (Yoder and
Sinnett 1985; Johnson and Schulman 1989; Williams 1992). Nevertheless, other research shows that white males are negatively influenced when they work in groups where they are in the minority (Chattopadhyay 1999; Henson and Rogers 2001).

Izraeli (1983) argues that the theory is also incomplete because it needs to differentiate between situational numerical domination and institutionalized domination, which is present regardless of whether a status group happens to be the numerical majority in a particular occasion. For example, Izraeli found that in union committees (a male domain), having an equal number of females on the committee did not alter individuals’ perceptions of women's role and leadership skills. Critics of tokenism suggest that gender creates different social contexts for token men and women. At a broader level, these criticisms suggest that tokenism may apply to members of categories that always have a lower social status, regardless of their numerical context (Alexander and Thoits 1985). This status can be attributed to their racial, ethnic, class, or educational groups. While nonstandard workers are not a uniform group, they do tend to occupy lower-status positions, be female, have lower education, and receive less pay and earn fewer benefits.

Another critique of tokenism is that it is often confounded with occupational inappropriateness (Yoder 1991). This refers to the presence of individuals who are traditionally thought of as being unsuitable for a job. Kanter studied women in occupations that were deemed inappropriate for women at the time. As mentioned earlier, her findings have been replicated with the first female corrections officers in male prisons (Jurik 1985), the first policewomen on patrol (Martin 1980), the first surge of female coal miners (Hammond and Mahoney 1983), and with female physicians (Floge and Merrill 1985). As these examples show, Kanter’s theory of tokenism has largely been applied to women in gender-inappropriate occupations (Yoder 1991).
Further, some authors argue that the effects of tokenism may also be effects of newness and as such, need to be disentangled from their proportion effects (Alexander and Thoits 1985). For example, women who have been numerical tokens in the workplace for several years may face fewer negative outcomes than female tokens who are new to an organization or an industry.

A related critique is that the proportion may in fact be a function of absolute numbers. Kanter only looked at one or two women among groups of about ten men. Outcomes may be different when there are ten women among a group of one hundred men, although the proportion is the same. It is possible that the proportion effects are strong only when there are a few tokens or when groups containing tokens are small (Alexander and Thoits 1985).

Finally, although they were tokens, the women described in Kanter’s research represented a large increase in the number of women in managerial positions from past years. In fact, they represented a fifty percent increase from a few years earlier (p.206). It is possible that the female managers may have faced performance pressures and poor relations due to their increasing numbers and the competitive threat this increase created, rather than due to their token status as hypothesized by Kanter. The effects of this intrusiveness are typically gendered. The gender typing of an occupation is closely related to its pay and prestige, with male-dominated occupations associated with higher pay and prestige than female-dominated occupations (Coser 1981). As a result, men may be more hurt by the intrusion of women in male-dominated occupations that offer more rewards, than by men entering lower paying and less prestigious female-dominated occupations.

Besides problems related to the concept of tokenism itself, there have also been criticisms of the reference group used in tokenism research. Studies on tokenism are often flawed because they compare the behavior of tokens with the behavior of the dominant group, rather than the
behavior of non-tokens of a similar social category (South et al. 1982). For example, many studies compare differences between female tokens and men. Instead, they should make comparisons between the behavior of female tokens and females who are in balanced groups and who perform similar job tasks. Furthermore, most studies rely on cross-sectional data, making it difficult to identify causality regarding tokenism.

Many of the criticisms of tokenism are difficult to address in empirical research due to sample limitations. When studying nonstandard workers, for instance, I could avoid confounding the effects of tokenism with those of social status by considering the effects of standard workers when they are in groups dominated by nonstandard workers. Practically, however, this is difficult to do because a representative sample of organizations will not contain many organizations where nonstandard workers are the majority group. Questions related to differentiating the effects of numerical and institutional domination can also be addressed by examining whether nonstandard workers experience poor outcomes when they are the majority group. Again, this is typically difficult to address, given that groups in which nonstandard workers are the majority are not common. Some research did find that temporary workers did not face negative outcomes when they were in the majority (Chattopadhyay and George 2001), although the authors found no negative effects when temporary workers were the minority either. Research might suggest that some types of nonstandard workers are always institutionally dominated, even if they are the numerical majority, given their low wages, few benefits and low status accompanying their employment arrangement (Kalleberg et al. 2000).

Nevertheless, two criticisms of tokenism can be addressed in my research. First, researchers argue that Kanter's proportion effects may in fact be a function of absolute numbers. This issue can be addressed in this study by examining effects as a function of proportions of
nonstandard workers as well as of raw numbers. Second, the idea that token effects could be the result of increasing numbers can also be addressed by examining the effects of an increase in the use of nonstandard workers from past years, relative to the increase in the use of standard workers. The criticisms of tokenism research do not take away from the usefulness of group proportions as one of several factors in organizational demography that affect the nature of work group life. Past research has highlighted that the theory holds for some populations but not others (e.g. women versus men). This study can help to further examine where the theory holds.

Blalock’s Theory of Competition

An alternative perspective originates in the race relations literature and suggests that minority individuals are worse off in terms of social isolation, social support, and prejudice when there are enough of them to present a threat to the majority. In other words, they are less accepted as their proportion increases, and not when they are tokens as Kanter suggests. This argument, referred to as competition theory, has been made in several disciplines; including sociology, psychology and political science (Key 1949; Allport 1954).

Competition theory is closely related to the provision and availability of power and resources and specifically to the differences in power between a dominant and a subordinate group (Blalock 1960). Bierstedt (1950) identifies three sources of power: numbers, resources (e.g., money, prestige, and knowledge) and social organization. Blalock adds membership in certain organizations (e.g., union membership) as a resource. Blalock (1956; 1957; 1960) suggests that groups compete for scarce and desirable resources. When the minority group is a very small percentage of the total, competition for resources and rewards is not very great, and the minority group is not likely to be perceived as a threat, but increases in the size of a minority
group also increase the perception of threat and competition, leading to greater hostility in an attempt to secure resources (Blalock 1967; Bonacich 1972). It is therefore assumed that the larger the minority, the greater the discrimination against it, since it is thought of as a greater perceived threat to the economic and political security of the majority.\(^3\)

Blalock posits a curvilinear relationship between the size of a minority group and negative social outcomes for minorities. He finds that there “seems to be a threshold somewhere between 5 and 10 percent nonwhite below which nonwhites tend to fare relatively well” (1957: 681). As the proportion of the minority increases, so does intergroup conflict, for reasons described above. Nevertheless, further increases in the size of the minority also give it more power against the majority. In other words, after some threshold level, the negative outcomes should decrease, making Blalock’s argument similar to Kanter’s (at least after this threshold level). He also argues that the increase from 10 to 20 percent in a minority would be more visible and produce a greater increase in competition than a difference between 50 and 60 percent, perhaps suggesting that the negative effects of an increase are more pronounced when the minority group is smaller (Blalock 1967: 148).

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\(^3\) Kanter also refers to resources and power in her book *Men and Women of the Corporation*. She argues that power is determined by structural conditions as opposed to personal characteristics or socialization effects. Specifically, she refers to power as “the ability to get things done, to mobilize resources, to get and use whatever it is that a person needs for the goals he or she is attempting to meet” (Kanter, 1977: 166). This definition of power suggests that the total amount of power (and resources) is restricted, just as it is in Blalock’s definition. According to Kanter, power and resources are derived from formal as well as informal sources. Formal power is found in jobs that are visible and central to key organizational processes. Informal power is derived from networks and support received from superiors, peers and subordinates inside and outside of the organization. Both sources of power allow access to support, information and resources to do a job effectively. When individuals are in positions that limit their access to support and resources, they perceive themselves to be powerless in the organization. Along with numerical proportions, power creates conditions that influence behavior and opportunities of advancement in organizations. Research suggests that tokens are often in jobs that offer little opportunities for advancement and they are less likely than members of the majority group to have resources such as alliances with individuals who can benefit them in their jobs. Kanter does not explicitly assume (in the way that Blalock does) that members of the majority feel threatened due to competition for resources when tokens are present. In fact, making this assumption would go against her argument that an increase in the number and power of tokens would lead to a more positive work environment, since an increase would likely lead to a greater perceived threat by the majority.
Several race scholars have found support for this minority group size-inequality hypothesis. Blalock (1956; 1957) reported a positive relationship between percent nonwhite and white-nonwhite income inequality. Giles (1977) found a positive relationship among Southern whites between the proportion of black residents and racially hostile attitudes. Reed (1972) also reported a positive relationship between percent black and number of lynchings in Mississippi counties between 1889 and 1930. Finally, Beck and Tolnay (1990) also found that lynchings were positively related to the relative size of the black population, since the superior status and financial fortunes of whites were being threatened when whites’ and blacks’ financial fortunes began converging. Stults and Baumer (2007) found a significant curvilinear relationship between percent black and police force size, which reflects a positive relationship with a decreasing slope4 and Matthews and Prothro (1963) reported a curvilinear relationship between white hostility and black political participation.

Most research using competition theory has focused on racial relations (Reed 1972; Frisbie and Neidert 1977; Beck and Tolnay 1990); however, Blalock’s theory has also been used to examine gender composition in the workplace (South et al. 1982; Wharton and Baron 1987; Tsui et al. 1992). For example, Tolbert et al. (1995) found that an increase in the number of women in a workplace resulted in increased competition and conflict, leading to increased turnover among women. South et al. (1982) found that support from male coworkers decreased with increases in the proportion of women in work groups. While the studies described above have examined the effects of heterogeneity on women, Wharton and Baron (1987) examined how men are affected by the proportion of females in the workplace. They also found support for competition theory, which emphasizes that intergroup relations worsen as groups approach

4 The size of a minority population has been linked to a fear of crime among the majority, which could lead to increases in public demand for larger police forces.
parity and become more balanced (Allport 1954; Blalock 1967). They specifically examined the effects of gender composition on men’s well-being and found that compared to men in male-dominated settings, men in mixed-gender work settings reported significantly lower job satisfaction, self-esteem and job-related depression. Surprisingly, the same men were also worse off than male tokens (i.e., men in female-dominated settings), supporting the criticism that the effects of tokenism are gendered in that they may only apply to lower status numerical minorities.

Olzak’s discussion of competition theory in relation to external labor markets can help explain the relationship between standard and nonstandard workers and make predictions regarding the types of interactions workers have with one another inside organizations (Olzak 1992). Olzak’s main hypothesis is that “ethnic conflicts and protests erupt when ethnic inequalities and racial ordered systems begin to break down’” (p.3). While Olzak’s research does not specifically discuss nonstandard workers, her discussion of competition theory to explain racial and ethnic conflict is general enough to help guide an examination of relations and conflict among different types of workers. She does not view race as an ascriptive and immutable characteristic; instead she treats race as emerging from differences and inequalities in power, income and other rewards (1992: 6). Her main argument, derived from competition theory, is that when labor groups start to mix they also begin to compete for the same valued resources, which in turn increases the likelihood of conflict and poor relations with each other. At a time when job security and long-term job contracts with benefits are becoming less common, these become limited resources, and workers begin to compete with each other to get them. Economic recessions also tend to reduce the resources and employment opportunities available to workers and therefore intensify the level of competition among groups of workers within organizations.
The influx of nonstandard workers in an organization, particularly ones who are willing to work for lower wages at a time when resources are limited, intensifies competition. Olzak also argues that directly competing for the same jobs is not the only way for competition to lead to antagonism and poor relations. Potential competition can also lead to conflict (1992: 30). This suggests that even fear of nonstandard workers taking jobs from regular workers and the perception of threat can lead to conflict, whether or not the two groups of workers are directly competing for jobs or not. The only study that I know of that uses Blalock's competition theory to examine varying proportions of nonstandard workers is one conducted by Broschak and Davis-Blake (2006), who found that increases in the proportion of nonstandard workers was associated with increased negative attitudes toward supervisors and peers and fewer helping behaviors, thus supporting Blalock's propositions. Nevertheless, their data came from two locations of a single firm, so it is not clear whether these findings would be replicated in other organizations in the U.S.

Both tokenism and competition theory suggest that numerical factors, and specifically group composition, influence social interaction and the quality of social relations. While Kanter suggests that majority-minority relations should improve once the proportion of minority members is over 15%, Blalock makes the opposite argument (i.e., that intergroup relations will become more negative and conflict will increase as the proportion of minority members increases). Blalock expects that at low levels (i.e. below 10%) minority groups do not encounter as much hostility, as they are not seen as a threat. Larger proportions of minority members are thought to threaten the majority members’ status, and lead them to perceive economic and social competition between themselves and the minority members. The majority then responds by reacting negatively toward the minority members and in some cases engaging in discriminatory
behavior. Nevertheless, once the minority group reaches some level, the negative behaviors it encounters begin to decrease. A summary of Kanter’s and Blalock’s predictions regarding proportions and hostile behavior are shown in Figure 1.

![Predictions regarding Proportions and Hostile Behavior from Kanter & Competition Theory](image)

**Figure 1. Predictions Regarding Proportions and Hostility from Kanter & Competition Theory**

Blalock’s competition theory fits with the reasons described earlier for the negative attitudes of standard workers. For example, the use of nonstandard workers may lead standard workers to question the security of their own jobs. The use of nonstandard workers may also generate negative attitudes by reducing promotional opportunities among standard workers. These ideas are consistent with Blalock’s theory of competition.

The main two perspectives may not be entirely contradictory. For example, Blalock acknowledges that after some minority threshold level, the negative effects facing minority group members decrease, making his predictions about group size and conflict similar to Kanter’s argument that relations should improve with increasing minority group members.

Each perspective, however, may be best suited for explaining particular contexts. Competition theory might be relevant in a competitive context, while Kanter's theory may be relevant in situations where people are not obviously competing for scarce resources. For
example, bringing in highly-paid contract workers with similar skills to standard workers may present more of a competitive context than hiring a group of low-paid temporary clerical workers, who are less likely to be perceived as a threat.

It is also possible that Kanter may be correct in her predictions about the initial effects of tokens (Yoder 1991) so that their small numbers lead to performance pressures, and role entrapment, and social isolation. As the number of people in the lower-status group increases, so does their competitive threat and intrusiveness, and reactions by the majority powerful group are escalated rather than reduced (Blalock 1967; Reskin 1988; Yoder 1991). In her study of women in law firms, Epstein (1981) found support for Kanter’s theory on tokenism, while also acknowledging that as the number of women in law firms grew, the “majority group, protecting its community, musters its forces to control its culture and its boundaries” (p. 194). Therefore, tokens may face initial pressures (as described by tokenism), but increases in the relative size of their group may be unlikely to bring positive change, as majority group members attempt to preserve their advantage (as described by competition theory).

The two perspectives also consider different outcomes. Whereas Blalock emphasizes poor relations, conflict and discrimination as outcome of his theory, Kanter highlights different sufferings of the minority group, such as role entrapment, social isolation, and performance pressures, rather than poor relations explicitly.

Finally, Kanter discusses increased minority representation, rather than increased representation in powerful positions--i.e., minority power (Chambliss and Uggen 2000). Perhaps her arguments may only explain increased representation, without a real increase in power. In other words, a sole increase in the proportion of women in a work group may lead to more positive outcomes for them, for reasons suggested by Kanter. If the increase is in the number of
women in powerful positions though, Blalock’s arguments may be more relevant, as the dominant group would be more threatened by an increase of a minority group in powerful positions than they would be by a mere increase in a work group.

While most of the literature has typically emphasized how ascribed characteristics may influence intergroup relations (e.g., race, age and gender), researchers argue that organizations can also create differences that are visible between workers and that have the potential to affect attitudes and behavior in similar ways (Williams and O'Reilly 1998; Reskin 2003). In other words, heterogeneity, whether it may be demographic or one that is created by organizations, has similar effects on work group dynamics. In her work on group composition, Kanter (1977) notes that “any situation where proportions of significant types of people are highly skewed can produce similar themes and processes. It was rarity and scarcity, rather than femaleness per se that shaped the environments of the (token) women” (p. 207).

Nonstandard Work Arrangements As Salient Characteristics

Recently, researchers have begun to consider employment arrangements salient characteristics that should affect relations in similar ways that race and gender have (Broschak and Davis-Blake 2006). There are at least three differences between standard and nonstandard workers that make employment arrangements salient and observable characteristics of workers that can be used to differentiate between members of work groups. These are visible differences, differences in task assignments given to standard and nonstandard workers, and differences stemming from organizational policies.

Many nonstandard workers are assigned differently colored identification badges or specially colored uniforms, making them easy to identify (Rafaeli and Pratt 1993; Smith 1998;
Broschak and Davis-Blake 2006). They are also often assigned to tasks that are less interesting and less complex than tasks assigned to standard workers. Finally, they may have restrictions on how long they are allowed to work in an organization and typically do not have access to training or other mobility opportunities offered to regular workers (Kochan et al. 1994). They may also not be allowed to participate in particular office functions or meetings (Hudson 2001).

Organizations often intentionally create physical distinctions and policies that differentiate between types of workers to avoid legal claims of employee status of nonstandard workers that have similar duties to standard employees.

Several authors point out that employees are very conscious of employment arrangements and believe them to be salient. Smith (1998) found that standard workers generally believed that temporary workers did not care about their work. Even temporary workers themselves often do not challenge the stereotype and talk about trying to avoid being the typically “bad” temporary worker (Henson 1996). Qualitative research also provides evidence of nonstandard workers being treated as objects at best or, at worst, as invisible. These studies, while non-representative, provide support for the argument that heterogeneity in employment arrangements is outwardly visible to workers, much like heterogeneity based on demographic characteristics, and can therefore have an impact on nonstandard workers and relations they have in the workplace (Tsui et al. 1992; Kalleberg and Schmidt 1996).

Using theories on group size, I expect that the proportion of nonstandard workers in an establishment will increase hostile behaviors and sexual harassment, and harm coworker relations and employee-management relations. Taking both perspectives into account, I expect that the effect of the proportion of nonstandard workers will operate more in the way Blalock and competition theory describe, rather than in the way tokenism describes. Past studies have shown
that the use of nonstandard workers leads to conflict between the two groups. While tokenism suggests that this is due to role entrapment, lack of communication, and performance pressures faced by tokens, qualitative research on nonstandard workers finds that conflict is mostly a result of status differences and job mobility opportunities (Broschak and Davis-Blake 2006). This is more in line with competition theory, rather than tokenism. Nevertheless, I take both Kanter’s arguments on tokenism and Blalock’s arguments about competition into account and expect that the relationship between the proportion of nonstandard workers and my outcomes will be nonlinear. Specifically, I expect that the use of nonstandard workers at low levels (5-10%) will be associated with hostile behaviors and poor social relations (consistent with Kanter). Furthermore, I expect these effects to become greater as the proportion of nonstandard workers increases (consistent with Blalock), until a threshold level. After this level I expect that increases in the use of nonstandard workers will no longer have such a great effect on hostile behaviors and poor relations among coworkers and with management.

Hypothesis 2a: Hostile behaviors will be related to the proportion of nonstandard workers in a curvilinear fashion (forming an inverted U).

Hypothesis 2b: Poor relations among workers and management will be related to the proportion of nonstandard workers in a curvilinear fashion (forming an inverted U).

Hypothesis 2c: Sexual harassment will be related to the proportion of nonstandard workers in a curvilinear fashion (forming an inverted U).

Some authors have argued that proportion effects may actually be a function of absolute numbers or a result of increasing numbers of a group (Alexander and Thoits 1985). I test for these possibilities by predicting the above hypotheses (regarding proportions), but as a function of absolute numbers of nonstandard workers and as a function of an increase in the use of
nonstandard workers from previous years (relative to the increase in the use of standard
workers).

*The Effect of the Use of Nonstandard Workers in the Core vs. Periphery*

The organizational distance between standard and non-standard workers may also have
an effect on how favorable their attitudes and behaviors are towards each other. Being hired to
work as a janitor through a temporary agency is unlikely to create much of a threat to permanent
employees. On the other hand, a non-standard employee working in the same group and
performing similar tasks as a standard employee may create opportunity for conflict. Whether
nonstandard workers are hired to perform tasks that are central to the organization or in the
periphery presents some interesting questions regarding relations and conflict. On one hand,
being hired in the periphery suggests that standard workers may be physically separate from
nonstandard workers and will not be perceived as a threat as suggested by Blalock. Working on
different tasks may also reduce the chances for interactions, and coupled with a low threat level,
one might expect relations to be neutral or positive. If attitudes are negative (because workers
lack opportunities for social interaction that help them get to know one another, and question the
in-group/out-group stereotypes they initially have) these negative attitudes may not lead to action
in terms of negative behaviors (i.e., hostile behaviors or sexual harassment).

If nonstandard workers are hired in the core, to work alongside standard employees, they
may present a bigger threat to the rest of the group. Working together may heighten group
conflict, particularly if the job of training and providing firm-specific knowledge to nonstandard
workers falls on the standard employees (Broschak and Davis-Blake 2006). Working alongside
each other can also have negative effects if standard workers assign undesirable tasks to
nonstandard workers or if standard workers perceive nonstandard workers to be untrustworthy, uncommitted, and unlikely to perform well, particularly because they may be held responsible for any errors made by nonstandard workers (Pearce 1993; Smith 1994). Some authors have argued that nonstandard workers have high error rates or lower productivity rates (Ansberry 1993; Caudron 1994), while other authors find that their performance is also rated lower than that of permanent workers (Ang and Slaughter 2001). Previous research has shown that standard employees often perform additional uncompensated tasks that make them resentful, such as training nonstandard workers. Conflict between standard and nonstandard workers is also likely to lead to poor relations with supervisors who make decisions regarding training and allocation of tasks. Consequently, I expect the following:

Hypothesis 3a: The use of nonstandard workers in the core will increase hostile behaviors more than the use of nonstandard workers in the periphery.

Hypothesis 3b: The use of nonstandard workers in the core will increase poor relations between workers and management more than the use of nonstandard workers in the periphery.

Hypothesis 3c: The use of nonstandard workers in the core will increase sexual harassment more than the use of nonstandard workers in the periphery.

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5 In examining the effects of heterogeneity in employment in a single firm, Broschak and Davis-Blake (2006) found that greater proportions of temporary workers led to more helping behaviors among group members. They explained this by arguing that because temporary workers do not have firm-specific knowledge, standard workers may be forced to help them. Therefore, the helping behavior may be involuntary and may not suggest cohesion among workers, so it may be a mistake to look at helping behavior as a form of positive relations among workers.
The Effect of the Type of Nonstandard Worker

Past research has pointed out the need to differentiate between nonstandard work arrangements, since these can have different effects on workers and on employee relations. For example, Davis-Blake et al. (2003) found that the use of temporary workers had a different effect on standard workers in terms of loyalty and intentions to quit than did the use of contract workers. In a later study, Broschak and Davis-Blake (2006) found that temporary workers had a more negative effect on coworker relations than did part-time workers, partly because temporary workers affected advancement opportunities of standard workers and also because the difference in their status levels likely triggered conflict between them, as suggested by organizational demography theory.

There are several reasons why different types of nonstandard workers may have difference effects on relations. First, nonstandard workers differ in the duration of their employment (Kalleberg et al. 2000). For example, contract workers work on a specific project that typically lasts for a specific length of time while temporary workers work until a firm no longer needs them, typically for short periods. Nonstandard workers who work in an organization for a short period of time may not have enough time to develop trust and positive relations among coworkers and management.

Nonstandard workers also differ in their degree of supervision (Kalleberg et al. 2000). Temporary workers, for example, are more likely to be supervised closely than are contract workers. Davis-Blake et al. (2003) suggest that the negative effects for standard employees are lower when contract workers are used compared to temporary workers, since they typically require less supervision and do not give additional supervisory responsibilities to standard
workers. Past research has shown that greater supervision may create resentment among standard employees if they are the ones left to do the supervising.

Contractors and temporaries also reflect different levels of externalization and the experience of highly paid contractors is likely to differ from that of low paid temporary employees (Ashford et al. 2007). For example, Pfeffer and Baron (1988) point out that the use of temporary workers deals with externalization in terms of reducing the length of employment, while the use of contractors is a form of externalization by changing the form of administrative control. Since contractors often add new knowledge to complement that of standard workers’, management is not as likely to replace their standard employees with contractors. On the other hand, temporary workers are used primarily to increase the size of the workforce (Matusik and Hill 1998) and their knowledge is often similar to that of standard employees. As a result, standard employees may feel more threatened by the presence of temporary workers.

As is discussed above in the section dealing with the use of workers in the core or periphery, the proximity of the nonstandard workers to the central work of the organization and thus to standard workers can also affect employee relations. Nonstandard workers who are administratively closer to the employer have a stronger negative influence than those who are kept administratively separate. In other words, the closer the nonstandard workers are to standard workers, the greater the threat they present. Different types of nonstandard workers typically have different levels of proximity to other workers. For example, temporary workers, who are physically proximate to the organization and are supervised on-site, have a stronger effect on negative attitudes and threat levels than do contract workers, who often work off-site, are less likely to be supervised, and are therefore kept further apart (Davis-Blake, Broschak et al. 2003).
Finally, the effect that a specific type of nonstandard worker has may reflect the extent to which the workers choose their employment arrangement. Temporary workers are more likely to be engaged in their employment arrangement involuntarily compared to contract workers, and are therefore more likely to seek permanent employment and to replace standard employees (Krausz, Brandwein, and Fox 1995). As a result, they may present more of a threat to standard workers. Several researchers argue that contract workers prefer their work arrangement and do not particularly desire a permanent job as their skills provide them with job security and high wages (Kunda et al. 2002). In fact, many leave permanent jobs in order to become contract workers. Therefore, standard workers will probably not fear that contract workers will attempt to gain permanent employment in the firm. Also, standard workers can gain useful information regarding job opportunities from contract workers, which can increase their external mobility (Matusik and Hill 1998), even if their internal mobility is hurt, so they may even enjoy working with contract workers.

For all the reasons described above, I predict the following:

Hypothesis 4a: The use of direct-hire temporary workers, temporary agency workers, and on-call workers will lead to more hostile behaviors than the use of contract workers or independent contractors.⁶

Hypothesis 4b: The use of direct-hire temporary workers, temporary agency workers, and on-call workers will harm employee-management relations more than the use of contract workers or independent contractors.

Qualitative research suggests that temporary workers are more likely than other nonstandard workers to be victims of sexual harassment. Research shows that low

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⁶ Although the studies described above do not discuss on-call workers, I expect them to have a similar effect as temporary workers. Like temporary workers, they do not have a permanent, set schedule, and are called to work on an ‘as needed basis’.
organizational status and sex segregation tend to intensify the likelihood of sexual harassment in the workplace (Paludi and Barickman 1991). Over half of temporary workers are women or racial minorities (Belous 1989). In fact, Rogers and Henson (1997) found that male temporaries were often mistaken for workers with higher organizational status or, if properly identified as male temporaries, were thought to be gay. This did little to challenge the subordinate status of females or the dominant status of males. Temporary workers also tend to perform tasks that are highly feminized, and they are often hired for their personal traits rather than their job skills. In addition, they are expected to be submissive and put up with improper treatment, thus making part of their job evaluation based on their proper enactment of gender. As a result, their work helps construct and reproduce gendered workplaces and gendered behavior. Although other types of nonstandard workers, such as contract workers and independent contractors, form part of the out-group compared to standard workers, they tend to enjoy higher social status than temporary workers. They are also less likely to perform tasks that are segregated by sex. I, therefore, expect that:

Hypothesis 4c: The use of direct-hire temporary workers, temporary agency workers, and on-call workers will lead to more instances of sexual harassment than the use of contract workers or independent contractors.

Potential Moderating Effect of Establishment Context

The organizational context not only affects workers’ understanding of what types of behaviors constitute sexual harassment, it also encourages or inhibits sexual as well as general harassing behaviors in the first place. Context shapes interpersonal dynamics and interactions within organizations (Morrill 1995). Even courts of law assign burden of responsibility regarding sexual harassment to organizations themselves, rather than simply to individuals.
Some research has identified workplace dimensions that are significant in the study of workplace harassment (Hodson, Roscigno, and Lopez 2006). Rather than describing individual stories that may offer little predictive power, placing these processes within a context by examining workplace structures allows for generalizable lessons. I consider how the workplace structure beyond composition and location of nonstandard workers affects the nature of interactions with nonstandard workers. Research on conflict and harassment has most often examined individual characteristics of bullies and their victims (e.g. Cowie et al. 2000). Quantitative research examining how such behavior can be promoted by the organizational context has not been explored as extensively. The research that exists tends to describe workers in general or discusses racial and ethnic minorities as likely victims. Furthermore, extensive research on the prevalence of conflict and hostile treatment towards or among nonstandard workers is uncommon.

Lopez et al. (2009) suggest that the routine activities model (Cohen and Felson 1979), which is typically used to examine criminal deviance, can be used to explain negative workplace behaviors. I utilize this model to identify organizational factors that act as perpetrators, and factors that act as guardians to help prevent incivility and harassment. These are factors beyond the composition of the nonstandard workforce or its location (i.e. core versus periphery) in the organization. The routine activities model also identifies potential victims of these behaviors.

Perpetrators

An anonymity/Large Organizations

Anonymity associated with large organizations is one of the organizational factors that may act as a facilitator of harassment and incivility. Workers in large organizations enjoy a
greater degree of anonymity and are more loosely connected, relative to those in smaller organizations (Ingham, 1967). Nonstandard workers already face a certain degree of anonymity and even more so in large organizations. Kalleberg and Van Buren (1996) found that relative to small organizations, large organizations tend to afford workers less self-direction and power. Sheer numbers also increase the probability that a sexual harasser will be present in the workplace (De Coster et al., 1999). I expect that the anonymity associated with large organizations will lead to more hostility and sexual harassment, all else being equal. However, I do not expect anonymity to have a significant effect on worker-management relations as workers are usually not anonymous to their manager.

*Job insecurity (as a workplace characteristic)*

Hodson, Roscigno, and Lopez (2006) argue that low job security can lead to lower trust and an environment that is prone to conflict. Other research also suggests that the job insecurity specifically brought about by organizational restructuring contributes to increased bullying (Hearn & Parkin, 2001). In an uncertain environment, relations with management become strained as fewer workers are required to do more work (Vaez, Ekberg, and LaFlamme 2004). Coworker relations also suffer as workers are left with uncertainty about their future jobs. Workers are likely to blame other workers and even management for their fears regarding their own security. Uncertain future employment may suggest that they are less constrained to act well towards one another. Heide and Miner (1992) found that cooperation among individuals is increased when there is an expectation of future contract. In other words, an environment filled by insecurity may breed and promote incivility. It can lead to lower expectations of having a
future employment relationship and lower motivation to act civilly because a short employment
future reduces the consequences of one’s actions.

Guardians

*Formalization*

There are also organizational factors that may act as organizational guardians or
deterrents of hostility and sexual harassment. Scott (1992) notes that one of the essential ways
organizations are different from other collectivities is in their formalization via the use of written
rules and standard operation procedures. A central problem of organizations is making sure that
employees act in ways consistent with organizational goals. *Formalization* serves to limit the
actions of employees through the creation of routine behavior, thereby reducing the need for
direct supervision. In other words, formalization is an indirect way of insuring control by
legitimizing the exercise of authority with the use of established premises for decision making.
Hodson (2002) finds that organizations that have clearly defined policies have more satisfied
workers and less vertical and horizontal conflict. Roscigno and Hodson (2004) also found that
workplaces without such policies encourage worker revolt and abuse of power, and give
individuals the freedom to intimidate others.

The extent to which an organization has formalized practices has an effect on hostility
and sexual harassment outcomes in two ways. First, formalized practices suggest that instances
of harassment will be documented in writing and can thus be reported by organizations when
they are asked to do so. Formalized practices may also act as inhibitors of hostility behaviors
altogether as they make it less likely that an individual will get away with the behavior. They
increase transparency, accountability, (Dobbin et al. 1993; Appelbaum et al. 2000) and therefore
costs for potential harassers. I expect that formalization constrains actors from acting in any form of hostility and particularly in sexual harassment, which has specific legal consequences. As far as relations with management are concerned, formalized procedures allow management to motivate and control workers without having to resort to intimidation (Jacoby, 2004). As a result, management’s relations with their employees may be more positive. The absence of this guardian, i.e. organizational chaos measured by poor communication and leadership, disorganization, and lack of formal procedures can heighten the possibility of incivility, poor relations, and sexual harassment (Lopez et al. 2009).

**Formal Grievance Procedures**

*Formal grievance procedures* act as an authority that exercises social control over employees. They indicate that an organization attempts to exercise social control over such behavior, which may discourage the behavior. Without such procedures, supervisors may feel free to act abusively towards their workers. Workers themselves may also feel free to act poorly towards their coworkers (Walker and Zelditch 1993; Molm 1997).

Gruber (1998) finds that complaints are less frequent in organizations that have proactive procedures regarding sexual harassment. These procedures may be more effective in deterring sexual harassment than general harassment, since there are specific legal ramifications for engaging in it. It should be noted that some research suggests that such procedures may actually hurt victims who go through with filing of complaints (Edelman 1990, 1992, 2002; Edelman, Fuller, and Mara-Drieta 2001). It should also be noted that these grievance procedures may not always correlate with laws that exist outside the organization. For example, as discussed above,
the definition of sexual harassment varies between organizations and may also differ from what a court would define as an instance of sexual harassment.

Work Teams

Finally, it is possible that work teams can act as a deterrent by providing transparency and accountability of one’s actions and increased costs of engaging in harassment (Hodson et al. 2006). An assumption exists that workers in such teams have a certain degree of control in decision-making activities and are thus treated with respect by management (Edwards and Collinson 2002). In other words, team-based organizations should have less conflict between workers and management. Nevertheless, some employees may not appreciate being asked to participate when they get little in return and have to endure greater surveillance (Barker 1999). Teamwork should also be associated with less coworker conflict because individuals form close bonds with one another and teamwork boosts the negative consequences of conflict. Work group solidarity also has a negative effect on sexual harassment (De Coster, Estes, and Mueller 1999), by promoting a civil work environment. Coworkers in these work groups may also be willing to intercede or end harassment and less likely to prey on each other. In other words, team-based organizations increase the likelihood that the harassment and hostile behaviors will be visible in the organization (transparency) and that the bad behavior will be punished (accountability).

Most research examines hostile behavior and sexual harassment using distinct literatures, without understanding how each type relates to the other (for a study that examines these comparatively, rather than separately, see Lopez, Hodson, and Roscigno (2009). Although many of the processes and consequences of sexual harassment differ from those of general hostile
behaviors (Hodson et al., 2006; Chamberlain et al. 2005), they also share some common processes and consequences.

Both enforce social exclusion and workers’ status hierarchies by putting down another’s status in order to elevate one’s own (Lopez et al., 2009). As a result, they often serve to protect the identity and position of the harasser. Lopez et al. (2009) argue that conflict and hostile treatment are parts of a larger process of social exclusion of certain groups, either by forcing them to leave or by keeping them in their place. Both types are also more likely to occur when there is a minority workforce and in jobs that are physically demanding (Lopez et al. 2009). Finally, both types can result in similar psychological consequences for victims (Berdahl 2007). Examining content-coded data of workplace ethnographies, Lopez et al. (2009) found that general hostility as well as sexual harassment often co-occur in organizations. Nevertheless, hostile behaviors have more to do with differences in power relations and less to do with targeting victims due to their gender. Also, general workplace harassment is not illegal while sexual harassment has a clear legal definition and is an offense for which an employer could be liable. Lopez et al. (2009) found that workplaces with workers who had low job security had more incidents of hostility. Instances of sexual harassment, on the other hand, were more closely related to a high female workgroup ratio, rather than job security. I take these differences into account by examining whether these “perpetrators” and “guardian” organizational factors, such as formal grievance procedures, have a different moderating effect on hostile behaviors, worker-management relations, and sexual harassment.
Victims

Several social scientists (e.g. Blau, 1964; Jacoby, 2004) argue that low relative status is a major determinant of victimization (Jacoby 2004). Differences in power may act as a protection from sexual harassment for some workers while rendering others vulnerable. As described using the organizational demography perspective, there are several factors contributing to the low relative status of nonstandard workers – they are often excluded, they are not seen as real employees, are often paid less than standard workers and perform jobs with little complexity, are afforded little job security, and are typically a numerical minority as well. They are also often powerless to act once they’ve been victimized because they are not actual employees of an organization. Finally, due to their status, nonstandard workers may also have an economic interest in keeping quiet. Such jobs are often accepted out of financial need, so the threat of losing their job may be particularly effective in suppressing reports by workers with little financial security (Uggen & Blackstone, 2004). As a result, relations with management may be strained as well.

Just as women’s subordinated positions often lessen their power relative to potential harassers and increase their vulnerability to sexual harassment, nonstandard workers’ positions (particularly if they are female) may also render them vulnerable to this type of harassment. Permanent workers tend to have higher status and more power than nonstandard workers and are thus less vulnerable to hostile behaviors as well as sexual harassment, regardless of their own perceived job security.

Bullies often try to social isolate their victims and nonstandard workers may be particularly vulnerable, particularly if they are already socially as well as physically isolated due to their employment status. Chamberlain et al., (2008) argue that sexual harassment may be an
attempt to exclude women, who are thought of as driving down men’s wages. Research on racial relations also finds that whites are less satisfied when they work with blacks because working alongside minorities is associated with flat career profiles and low pay. A similar argument could be made that sexual harassment by standard workers may be an attempt to exclude nonstandard workers, whose presence might drive down their own wages.

It is also possible that even nonstandard workers with relatively high status provoke resentment and may be targeted for sexual harassment, as a strategy used to assert the dominance of standard workers. Indeed, potential competitors are also targets of harassment (Yamada, 2000), if others feel threatened by their presence.

**Individual-Level Outcomes for Nonstandard Workers**

All of the hypotheses so far examine the conditions under which using nonstandard workers lead to negative social interactions. They predict effects at the organizational level. Nevertheless the establishment-wide outcomes do not reveal who is engaging or harmed by these negative interactions, making it important to make explicit hypotheses regarding the experiences of standard and nonstandard workers. As described earlier, it is easy to make the ecological fallacy and assume that, since I expect the use of nonstandard workers to erode social relations, nonstandard workers are obviously the victims. This claim needs to be tested though, using individual data that is matched to those at the establishment.

Below, I present hypotheses at the individual level. In other words, I examine whether the negative interactions occurring at the organizational level affect one group of workers more than another. Specifically, I test whether nonstandard workers are the group harmed by these interactions, as qualitative research seems to suggest. My specific hypotheses are listed below.
Past research, organizational demography, theories about relative group size, and the routine activities model all suggest that nonstandard workers are the ones who bear the brunt of hostility and conflict in the workplace. For example, studies find that they are often looked down upon, suffer negative treatment, and treated with disrespect (Geary 1992; Smith 1997; Hudson 2001; Feldman et al. 1994). The way nonstandard work is organized often leaves workers prone to sexual harassment as well. Relational demography also suggests that the out-group is more likely to suffer from in-group/out-group interactions. Theories related to group size (i.e. tokenism and competition theory) also imply that minority groups are the ones who are harmed by negative interactions between groups.

Hypothesis 5a: Nonstandard workers are more likely than standard workers to experience hostile behavior.

The use of nonstandard workers affects more than the relations among coworkers; it is also linked to poor relations between standard workers and management. Case studies have shown that the use of nonstandard workers lowered the trust and commitment of standard workers towards their organization. (Pearce 1993; Ang and Slaughter 2001; Olsen 2003), and that relations between managers and workers suffered as well (Broschak and Davis-Blake 2006). Standard workers’ relations with their supervisors may also be hurt if they feel their psychological contract has been violated or if their job security is at stake. Nonstandard workers are less likely to feel that their psychological contract has been violated. Therefore, I expect that:

Hypothesis 5b: Nonstandard workers are less likely than standard workers to experience poor relations with management.

Finally, based on past theoretical and qualitative work on nonstandard workers and sexual harassment, I predict that:
Hypothesis 5c: Nonstandard workers are more likely than standard workers to experience sexual harassment.

The Effect of Proportions at the Individual Level

I also examine whether nonstandard workers are especially likely to be treated poorly as their proportion in the organization increases. Based on my predictions at the organizational level, I expect that negative social interactions will be more prevalent for nonstandard workers as their relative group size increases.

Hypothesis 6a: The connection between being a nonstandard worker and experiencing hostile behavior will be positively related to the proportion of nonstandard workers in the organization in a curvilinear fashion (forming an inverted U).

Greater proportions of nonstandard workers may be a signal that management values the use of nonstandard workers, so I expect nonstandard workers’ perceptions of their relations with management to improve when they work in organizations that employ a greater proportion of nonstandard workers.

Hypothesis 6b: The connection between being a nonstandard worker and experiencing poor relations with management will be negatively related to the proportion of nonstandard workers in the organization in a curvilinear fashion (forming a U).

Hypothesis 6c: The connection between being a nonstandard worker and experiencing sexual harassment will be positively related to the proportion of nonstandard workers in the organization in a curvilinear fashion (forming an inverted U).

It should be noted that standard and nonstandard workers may perceive their relations differently, perhaps due to different expectations, and may be affected to a different extent by the
blending of workers. Their perceptions are based on past experiences and future expectations so standard and nonstandard workers may be comparing their present situation to a different past and projected future. Different reference groups could be used when comparing themselves to other workers. For example, the fact that results have been contradictory regarding satisfaction of and commitment of standard workers versus that of nonstandard workers (McGinnis and Morrow 1990; Lee and Johnson 1991) may suggest that the reference group (i.e., the composition of the work-group) may be different in each study. For example, Feldman (1990) argues that part-time workers often use other part-timers as their frame of reference, rather than full-time employees, when they compare pay and satisfaction with relations.

**Summary**

To summarize, the hypotheses at the establishment level predict that using nonstandard workers will increase instances of hostility and sexual harassment in the establishment and affect worker-management relations negatively. These predictions are made using different ways of measuring nonstandard workers. The first set of hypotheses, derived from organizational demography, suggests that the presence of nonstandard workers is important, while the second set of hypotheses, derived from theories of group size, predicts that the proportions of nonstandard workers influence outcomes. The third set of hypotheses, derived from competition theory, suggests that the position of nonstandard workers in an establishment is significant, and finally, the fourth set of hypotheses, derived from qualitative research, predicts that the use of different types of nonstandard workers matters.

All of the above hypotheses only predict establishment-level outcomes and say little about predictions at the individual level. If the establishment-level hypotheses are supported (i.e.
using nonstandard workers leads to greater hostility, poorer worker-management relations, and more instances of sexual harassment) it does not necessarily mean that it is the nonstandard workers who are the victims of these behaviors. As a result, separate hypotheses are made at the individual level to determine who is affected by these outcomes. Past qualitative research, as well as predictions from organizational demography, suggests that it is indeed the nonstandard workers who are more likely to experience hostility and sexual harassment, yet less likely to experience poor relations with management, than standard workers. These individual-level hypotheses are important to test to ensure that gross ecological fallacies are made.
CHAPTER 4

DATA

The 2002 NOS and GSS

Most workplace studies using quantitative data rely on individual-level data and focus on factors such as race and education to predict differences in workers’ outcomes, or they rely on establishment surveys that do not include much information about workers (Nelson 1995). There are presently few matched data sets on U.S. employers and their workers (Kmec 2003). As a result, sociological research has been somewhat limited in its conclusions regarding work processes.

Kmec (2003) mentions three reasons for the absence of matched data in the United States. The first is limited availability and access to administrative data. A second problem is high respondent refusal, resulting either from workers’ fear of sharing workplace information, particularly if they work in a small establishment, or from employers’ unwillingness to share information on operating procedures. Finally, researchers face the challenge of maintaining worker and employer confidentiality, and often do so by signing confidentiality contracts and restricting access to the data.

The data I draw upon come from a national survey of US workers and a national survey of US organizations that are linked together; the 2002 General Social Survey (GSS) and the 2002 National Organizations Survey (NOS). The GSS is a nationally representative survey of all adult Americans and contains information on demographic
characteristics and attitudes of respondents. The National Organizations Survey contains responses from employers of 516 GSS respondents regarding employment policies and structures of their organizations (Smith, Kalleberg, and Masden 2003). These data are particularly useful for examining nonstandard work as they contain multilevel information about the use of different types of nonstandard workers as well as information regarding social relations in the workplace and incidents of hostile behavior.

Using information from the GSS and NOS is beneficial as I am able to examine how workers influence organizations and how organizations influence workers. If I were to only use the NOS data, I would not be able to investigate individual-level outcomes, such as whether nonstandard workers are at a higher risk of maltreatment than other workers. On the other hand, solely focusing on the GSS data would preclude an investigation of organizational level outcomes and obscure the effect of organizations on individual-level outcomes. For instance, I could not examine whether social relations in an organization deteriorate as the percentage of nonstandard workers increases or whether the consequences of being a nonstandard worker varies from one type of organization to the next. Using matched establishment and individual-level data makes it possible to examine all of these topics. Employers are able to supply information about the organization, while workers provide individual-level data. As a result, these data provide information on how the organizational context and organizational practices affect relations among workers and between workers and management, as well as how individual-level characteristics affect these outcomes.
The matched data set linking the NOS with the GSS began with a random sample of employed individuals identified in the GSS who identified their employer’s name and address. A researcher then contacted each establishment and asked a key employee at the establishment questions without revealing the name of the employee who identified the establishment. The NOS contains questions on four types of human resource practices: recruitment and staffing, training, promotion opportunities, and incentives such as earnings and fringe benefits. It also has questions on core organizational structures such as complexity and formalization.

The biggest limitation of these matched data is that they only contain one worker per organization and thus only allow for between-establishment analyses (Kalleberg 1994; Kmec 2003). Ideally, I would like to be able to use data that have information about many workers in each establishment, so that within-establishment and between-establishment comparisons can be made. In other words, these data do not allow for differences between different work groups within an establishment to be made. Another limitation is that some workers may have difficulty naming their organization, particularly if they are employed by one company but work on-site at a second organization, as is sometimes the case for nonstandard workers.

Nevertheless, these data seem advantageous over matched data that sample and collect data about establishments and then rely on the establishments to generate a random sample of workers. Establishment samples derived from administrative sources may not be representative as they often miss newly-formed or informal establishments (Aldrich et al. 1989). Furthermore, the linked samples of workers are unlikely to be
representative of the employees at each establishment and are thus less than ideal for studying how establishment-level characteristics influence workers. If lists of organizations are incomplete creating an incomplete sampling frame, it is only possible to use non-probability sampling methods. The samples of workers may be especially likely to overlook nonstandard workers, who may not be considered full-fledged employees.

Drabek et al. (1982) find that, among organizational studies published in 10 sociology journals between 1965 and 1979, 13% of research used random sampling, 27 purposive, 35 convenience, and 27 dense sampling. Many samples tend to under-represent small organizations, thus under-estimating relationships. Analyzing data on only large organizations means that findings cannot be applicable to smaller organizations. The establishment-first method can also be very time-consuming and more costly than beginning with a sample of workers (Kmec 2003). The GSS and NOS data, on the other hand, are less likely to miss new and informal establishments, because they are identified by the workers themselves, making the sample as current as the time of the interview (Kalleberg et al. 1990).

Unlike many organizational surveys, the NOS contains a large number of establishments as well as a wide variety of establishments. This, as well as the probability sample of different types, sizes, and ages of organizations, indicate that the 2002 NOS is likely to rate well on representativeness just like the first NOS (Kalleberg, Knoke, Marsden, and Spaeth, 1994). Spaeth & O’Rourke (1994) considered whether the first NOS was representative of the same population as the GSS and whether it could be considered representative of the labor force in the U.S and concluded that it was indeed
representative of the labor force in terms of industry, occupation, and number of employees. Therefore, the external validity of the data used in my analysis should be particularly high compared to other matched data.

Data Collection

Half of all household respondents in the GSS were asked to provide contact information for their place of employment to be used in the NOS. There were 888 completed interviews of GSS respondents who were eligible for the NOS study. Around 82% (n=726) of the 888 respondents supplied their establishment’s name, 68.7% (n=610) supplied their establishment’s address, and 68.5% (n=608) provided a telephone number. 14 cases of the original 888 cases were duplicates, meaning more than one respondent worked at the same physical location, leaving 874 unique physical locations. Interviewers were unable to obtain usable address information for 156 cases so, rather than excluding these cases, information on their name and address was imputed using the GSS 2002 industry and geographic codes as the criteria for selection. The information of an organization within the same industry and geographic area was then chosen using yellowpages.com to replace the missing sample information for the 156 cases. The unadjusted rate (i.e. complete rate) was 59% (n=516), while the adjusted rate (i.e. participation rate, adjusted for all cases that were either not located, no longer existed, or were duplicates of other physical locations) was 62.4%. Overall, there were 516 completed questionnaires.
I include all 516 establishments in my establishment-level analysis, whether they utilize nonstandard workers or not. After accounting for data that are missing on my relevant variables, I have a sample size of 474 organizations. For the individual-level analysis, I start with the 474 employed individuals who are linked to the NOS study. Even though the GSS contains information on many more respondents, in order to examine the individual-level effects of individuals working in the NOS establishments, I only include respondents who are directly linked to the NOS rather than a sample of all employed individuals, to ensure that the establishment context and individual workers are linked to each other. After accounting for missing data, I am left with a sample size of 464 individuals. Below, I describe the measures I use for the establishment-level analysis (using the NOS data), and the individual-level analysis (using the GSS data, with control measures from the NOS).

Dependent Variables at the Establishment Level

Hostile Behaviors

I measure hostile behaviors within the workplace using a binary variable that measures the existence of any of the following during the past 12 months: verbal or written threats (including incidents of shouting, swearing, threatening e-mails, or attempts to provoke arguments), bullying (including repeated intimidation, slandering, social isolation, or humiliation by one or more persons against another), and incivility, such as acting rude or discourteously. This last behavior is minor, compared to threats or
bullying, so I created an additional measure of hostility that excluded incivility. This measure, however, did not change the findings from the regressions.  

**Employee-Management Relations**

Employee-management relations are assessed using the following question: “How would you rate the relationship between management and employees generally at this workplace?” (1, “very good,” 5 “very poor”).

**Sexual Harassment**

I measure sexual harassment in the workplace as a dummy variable using a question that asks whether there have been formal complaints in the past twelve months regarding sexual harassment. Sexual harassment is defined in the NOS survey as incidents such as story telling about sexual attributes or behavior, repeated unwanted requests for someone to go out “socially” or on a date, or trying to touch someone in a sexual way when not encouraged.

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7 I originally created a construct of underlying hostility in an organization in AMOS using all of the measures in my dependent variables (i.e. hostile behaviors, sexual harassment, and poor employee-management relations). Nevertheless, the measures of fit suggested that the specified model should be rejected and that the variables did not represent one latent construct. This isn’t too surprising as the literature on general conflict and sexual harassment argues that, although they share some commonalities and underlying causes, these two behaviors are distinct processes and are affected by different factors (e.g. Lopez et al. 2009). Part of what my analysis can achieve is to examine whether similar organizational factors facilitate or inhibit both general hostility and sexual harassment.
Independent Variables at the Establishment Level

Use of Nonstandard Work Arrangements

I measure the use of nonstandard workers based on employers’ responses to several questions regarding their establishment’s use of different types of workers. Specifically, they were asked the following questions: “Does your establishment use any on-call workers, that is, workers who are on your payroll and who are called in to work only as needed?”, “Are there any temporary or contract workers who work at your establishment but are on the payroll of another company?”, “Are any of the workers independent contractors, independent consultants, or freelancers?”, and “Does your establishment use any short-term temporary workers who are hired directly by the establishment instead of through a temporary help agency or a contract company (1, “yes,” or 0, “no”). I then created a binary variable that was coded 1 if the establishment used any type of nonstandard workers and 0 if it did not.

Size and Proportion of Nonstandard Workers

Employers also reported the number of nonstandard workers of various types that they employ, which I used in conjunction with the variable on organizational size to create a measure of the proportion of nonstandard workers in the organization. From this variable, I created an ordered variable with five categories (0, “no nonstandard workers in organization,” 1, “greater than 0 but less than 5 percent,” 2, “5 percent to less than 10 percent,” 3, “10 percent to less than 20 percent,” and 4, “20 percent or greater). These are not the same cut-offs proposed by Kanter or competition theory. Rather, they divide
establishments into small enough groups for me to examine the predictions of both
theories about the general shape of the relationship. These dummies cut the distribution
of the proportions into smaller sections than those that Kanter, Blalock, and authors using
their predictions have considered. For example, Izraeli (1983) examined two
proportions; 20% or less and 41%-60%, while Spangler et al. (1978) observed differences
among proportions of 20% and 33%. The smaller sections included here allow the
models the flexibility to capture curves that may not have been anticipated. Blalock
predicts minority groups initially fare well at very low levels (5-10%). Between 10-20%
I expect to see a significant change in my outcomes. Competition theory suggests that at
this level, social interactions will become increasingly negative (tokenism predicts the
opposite). Since few organizations have groups of nonstandard workers greater than
20%, I group any level greater than 20% in one category. I also measure the raw number
of nonstandard workers to examine the effect of the number of nonstandard workers
beyond that of proportions.

Increase in the Use of Nonstandard Work Arrangements

Finally, respondents also answered a question having to do with the change in the
size of different types of nonstandard workers relative to the size of their regular
workforce. Specifically they were asked the following question: “Has (establishment
name)’s use of on-call increased, decreased, or remained about the same relative to the
size of your regular workforce since 1998?” The same question was asked for the use of
temporary agency workers, contract workers, independent contractors, and direct-hire
temps. Using this information I created 3 dummy variables for each type of nonstandard worker; one for an increase in the use, one for a decrease in the use, and one signaling no change in the use.

Use of Nonstandard Workers in the Core/Periphery

Employers were also asked whether they employed nonstandard workers for their “core” job. The “core” occupation is identified by the question “What is the job title for the employees who are most directly involved with the main product or service provided by the establishment?” If more than one job title was given, the one with the most employees was chosen as the “core.” Specific questions regarding whether any “core” workers were temporary agency workers, direct-hire temporaries, or contractors (including both independent contractors, and employees of a contract company) were asked as well as how many nonstandard workers worked in the core. As a result, I was able to identify whether organizations employ nonstandard workers for main jobs, or for functions peripheral to the organization, and the relative size of nonstandard workers as a whole as well as each type of nonstandard worker used in the core.

Different Types of Nonstandard Work Arrangements

I assess the use of different types of nonstandard work and run additional analyses for each type, to see whether different types of nonstandard workers have a different effect on my dependent variables. I am able to separate temporary and contract workers with the questions “Are any of these workers employed by a temporary help agency?”
and “Are any of these workers employees of a contract company?” As a result, I can identify the use of 5 types of nonstandard workers: on-call workers, temporary agency workers, contract workers, independent contractors, and direct-hire temporaries.

**Moderators**

**Anonymity/Large organizations**

I predict that, partly due to anonymity, large organizations will act as a perpetrator between the use of nonstandard workers and my outcomes. Organizational size is measured as a continuous variable using a list of questions that asks for the total number of full-time, part-time, on-call, temporary, and contract workers, as well as independent contractors and direct-hire temporaries.

**Job security (at the organizational level)**

I examine whether hostile behaviors and sexual harassment are moderated by the overall sense of job security in the organization and the implicit threat of losing one’s job using the following question: “Has your organization made any explicit or implicit commitment to its employees to avoid layoffs, except in extreme circumstances?”

**Formalization**

I predict that formalization will act as a deterrent of hostile relations and sexual harassment. I use a measure of formalization developed by Marsden, Cook, and Kalleberg (1996). It is a count of the following practices for which an establishment has
written documentation: job descriptions, job performance, employment contracts, safety and hygiene practices, policy about workplace violence, and policy about weapons on the premises. Small organizations tend to be less formalized than larger ones (Kalleberg, Knoke, Marsden, and Spaeth, 1994). I therefore test to ensure that there are no problems of multicollinearity between organizational size and formalization. The correlation between the two variables is 0.2 and the VIF is low enough to not cause problems with multicollinearity (VIF = 1.04).

Formal Grievance procedures

I include two measures of formal grievance procedures; one relating to general disputes and one relating to sexual harassment. Employers were asked whether there are formal procedures for resolving disputes between employees and their supervisors or coworkers and also whether there is a formal procedure by which employees may make complaints about sexual harassment by co-workers or supervisors. Each of these measures is coded 1 for yes.

Work teams

Team-based organizations are thought to moderate the relationship between using nonstandard workers and my dependent variables so I include a binary measure based on a question that asks whether workers are involved in work teams when they do their job.
Establishment Controls

I control for other establishment factors that could affect conflict and relations. I measure industry with dummy variables for the following categories: agriculture & construction, manufacturing, transportation and communication, trade, finance, public administration, and service. The industry is reported by the representative of the establishment interviewed for the NOS. Employers were asked whether employees performing a core job were covered by a union contract. I also control for the following types of training offered at the establishment: training in conflict resolution or de-escalation techniques and training in restraint of disruptive persons or management of disruptive behavior.

Dependent Variables at the Individual Level

I use the GSS to identify variables at the individual level of analysis, where the respondent is an employee of a matching establishment found in the NOS.

Hostile Behavior

I measure hostile behavior with a question that asks whether a respondent had been threatened or harassed in any other way by anyone while they were on the job in the past 12 months. Note that, unlike the NOS, the GSS did not provide a definition of harassment for respondents. This variable thus measures the respondent’s subjective experiences.
Employee-Management Relations

I measure management-employee relations with a question that asks how good relations are between management and employees. Responses range from 1 “very good” to 5 “very bad.” Higher ratings signify poorer employee-management relations.

Sexual Harassment

I identify sexual harassment using respondents’ answers regarding their experiences on the job. Respondents were asked whether they have been sexually harassed on the job during the last 12 months. Out of the respondents who said they were sexually harassed, 44% also reported that they were threatened on the job in the last 12 months.

Independent Variables at the Individual Level

Nonstandard Worker

For my individual analyses, I begin with examining whether nonstandard workers are more likely to bear the brunt of the conflict measured at the organizational level. I measure whether the respondent is a nonstandard worker using a question that asks for the work arrangement they have. If they responded that they are an independent contractor, an on-call worker, a temporary agency worker, or a contract worker, they were assigned a value of 1 for “nonstandard worker.”
Control Variables

I control for job, establishment, and personal characteristics that are likely to affect my outcomes. Job characteristics that are included as control variables are income, union membership, length of time in current job, job security, and occupation. I use an ordered variable for income with 5 categories (less than $10,000, $10,000 to < $20,000, $20,000 to < $40,000, $40,000 to < $60,000, and $60,000 and above) to measure the respondent’s income. These are entered as a set of dummies in the regressions, with the category “less than $10,000” as the reference. Length of time worked in present job for a current employer is measured in years. Because job security could affect the level of threat employees feel by the presence of nonstandard workers, I measure job security with the phrase “The job security is good”, with responses ranging from 1 “not at all true” to 4 “very true.” The following occupational controls are used: managerial/professional, technical/sales/administrative, and service occupation.

I include the moderator variables at the level of the establishment as controls in my individual analysis (e.g. organizational size, formalization, formal grievance procedures). Rather than including a control for team-based organizations, I include a measure that asks whether the respondent works as part of a team. Other controls are working in an establishment that uses varying proportions of nonstandard workers, and offering training on conflict resolution.

Finally, I include controls for age, gender, and race. I measure the respondent’s age as a continuous variable. I include controls for gender and race, using two dummy variables coded 1 for “female” and “white” respectively. I measure education with a
dummy variable signifying some college and above. I include descriptive statistics for all of establishment-level and individual-level variables in Tables 1.1 and 1.2 respectively.

**Limitations of Data**

A limitation with both data sets though is that the data are cross-sectional, making it more difficult to know for certain if relations, for example, between employees and managers were suffering prior to the use of nonstandard workers. The NOS questions are answered by the employer. The variable for hostile behavior is thus based on whether the respondent is aware of these situations. Similarly, the sexual harassment variable is based on formal complaints, so it doesn’t capture instances of harassment that did not lead to a formal complaint. There is also an issue with employee-management relations variable as it is also based on the employers’ perception. The employer might either perceive relations to be more positive than they really are or be tempted to report more positive relations to the interviewer due to social desirability. Indeed, relations are more positive at the NOS level compared to the GSS, where they are reported by workers. The correlation between relations reported by the employer and those reported by the respondent in the GSS is only 0.22, with a slightly higher mean being reported by individuals (higher scores indicate poorer relations on a scale of 1 to 5). The same is true for the measure of job security at the organizational level; the employer’s perception of job security may not be shared by the workers. Nevertheless, subjective indicators still add value since outcomes, such as worker-management relations, hostility, and even sexual harassment, can also be thought of as subjective experiences. Also, the fact that
the data contain information on both the employers’ perceptions as well as individuals’ actual experiences in the same establishments allows one to examine these discrepancies.

The variables in the NOS do not identify who is being targeted during the instances being reported. Nevertheless, the GSS can lead to some insight on individuals’ experiences that might be lost at the NOS level, particularly for nonstandard workers who may feel powerless to report incidents formally, and who may be more honest about their experiences in their answers on the GSS. In other words, even if a respondent never filed a formal complaint regarding an incident of hostility or sexual harassment, they could still answer “yes” on the GSS questions about those topics. In fact, one of the advantages of these matched data is to be able to find respondents who have had these experiences but have not reported them to the establishment. Finally, the individual level analysis deals with outcomes that are relatively rare (e.g. sexual harassment and threats), making it more difficult to find statistical significance, even if the effect is strong. Nonetheless, there are statistical techniques available that are specifically designed to deal with rare outcomes.

If no matched data sets were available, one would have to examine separate samples of establishments and workers that had no connection to each other if they wanted to examine outcomes at both an establishment level and an individual level. In other words, the findings would not correspond with the workers of the establishments studied or with the establishments of the individuals studied. Matched data, on the other hand, provide relevant contextual information when examining the experiences of individual workers and findings that directly relate to both levels of analysis. The GSS
data on the individuals is linked directly to the NOS data on establishments, opening the door for research into individual outcomes linked to organizational practices. Finally, the GSS is already a highly credible data source and is heavily used by sociologists and other researchers.

I begin with an analysis of how using nonstandard workers is related to outcomes at the establishment level. I run separate analyses for each of my main independent variables (i.e., use of nonstandard workers, size of the nonstandard workforce, whether the nonstandard workers are used in the core, types of nonstandard workers, and increases in the use of nonstandard workers relative to the increase of standard workers). I consider how these variables affect hostile behaviors, management-employee relations, and sexual harassment. I then use the individual-level data to determine who bears the brunt of the outcomes considered above. I discuss the analytic strategy in more detail in the following results chapters.
Table 1.1. Means and Proportions of Establishment-Level Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostile Behavior</td>
<td>0.64</td>
<td>(0.48)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Employee-Management Relations</td>
<td>1.55</td>
<td>(0.65)</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Sexual Harassment</td>
<td>0.19</td>
<td>(0.39)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Measures of Nonstandard Workers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of nonstandard workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0% - no nonstandard workers</td>
<td>0.51</td>
<td>(0.50)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&gt;0% to &lt;5%</td>
<td>0.18</td>
<td>(0.39)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5% to &lt;10%</td>
<td>0.10</td>
<td>(0.30)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10% to &lt;20%</td>
<td>0.08</td>
<td>(0.28)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20% or more</td>
<td>0.12</td>
<td>(0.33)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Organization uses nonstandard workers in core</td>
<td>0.26</td>
<td>(0.44)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Organization uses nonstandard workers in periphery</td>
<td>0.57</td>
<td>(0.50)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Organization uses oncall workers</td>
<td>0.27</td>
<td>(0.45)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Organizations uses direct-hire temporaries</td>
<td>0.16</td>
<td>(0.37)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Organization uses temporary agency workers</td>
<td>0.26</td>
<td>(0.44)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Organization uses contract workers</td>
<td>0.14</td>
<td>(0.35)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Organization uses independent contractors</td>
<td>0.25</td>
<td>(0.43)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Other Establishment-Level Characteristics</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Establishment size/1000</td>
<td>0.58</td>
<td>(2.01)</td>
<td>0.001</td>
<td>28</td>
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<tr>
<td>Commitment to avoid layoffs</td>
<td>0.33</td>
<td>(0.47)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Formalization</td>
<td>3.84</td>
<td>(2.05)</td>
<td>0</td>
<td>6</td>
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<tr>
<td>Formal dispute resolution procedures</td>
<td>0.64</td>
<td>(0.48)</td>
<td>0</td>
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<td>Formal sexual harassment procedures</td>
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<td>(0.48)</td>
<td>0</td>
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<td>Establishment uses teams</td>
<td>0.68</td>
<td>(0.47)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Industry</td>
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</tr>
<tr>
<td>Agriculture/Construction</td>
<td>0.07</td>
<td>(0.25)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.11</td>
<td>(0.32)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Transportation/Communication</td>
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<td>(0.22)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trade</td>
<td>0.17</td>
<td>(0.37)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Finance</td>
<td>0.04</td>
<td>(0.21)</td>
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<td>1</td>
</tr>
<tr>
<td>Public administration</td>
<td>0.07</td>
<td>(0.25)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Service</td>
<td>0.49</td>
<td>(0.50)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Employees covered by union contract</td>
<td>0.18</td>
<td>(0.38)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Conflict resolution training</td>
<td>0.47</td>
<td>(0.50)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Disruptive behavior training</td>
<td>0.36</td>
<td>(0.48)</td>
<td>0</td>
<td>1</td>
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N: 474
Table 1.2. Means and Proportions of Individual-Level Variables

<table>
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<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>Min</th>
<th>Max</th>
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<tr>
<td><strong>Dependent Variables</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostile Behavior</td>
<td>0.13</td>
<td>(0.34)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Employee-Management Relations</td>
<td>1.99</td>
<td>(0.98)</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Sexual Harassment</td>
<td>0.05</td>
<td>(0.23)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Personal Characteristics</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nonstandard worker</td>
<td>0.18</td>
<td>(0.39)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>0.55</td>
<td>(0.50)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>White</td>
<td>0.80</td>
<td>(0.40)</td>
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</tr>
<tr>
<td>Age</td>
<td>41.38</td>
<td>(12.95)</td>
<td>18</td>
<td>82</td>
</tr>
<tr>
<td>Some college and above</td>
<td>0.38</td>
<td>(0.49)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Job Characteristics</strong></td>
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<td></td>
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</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>&lt;$10,000</td>
<td>0.15</td>
<td>(0.36)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>$10,000 to &lt;$20,000</td>
<td>0.15</td>
<td>(0.36)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>$20,000 to &lt;$40,000</td>
<td>0.33</td>
<td>(0.47)</td>
<td>0</td>
<td>1</td>
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<tr>
<td>$40,000 to &lt;$60,000</td>
<td>0.15</td>
<td>(0.35)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>$60,000+</td>
<td>0.09</td>
<td>(0.29)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Belongs to a union</td>
<td>0.08</td>
<td>(0.26)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Length of time at current job in years</td>
<td>6.87</td>
<td>(8.31)</td>
<td>0.25</td>
<td>47</td>
</tr>
<tr>
<td>Job security</td>
<td>3.37</td>
<td>(0.89)</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Works as part of a team</td>
<td>0.54</td>
<td>(0.50)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial/Professional</td>
<td>0.36</td>
<td>(0.48)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Technical/Sales/Administrative</td>
<td>0.26</td>
<td>(0.44)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Service</td>
<td>0.17</td>
<td>(0.37)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>N</strong></td>
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CHAPTER 5

ESTABLISHMENT-LEVEL FINDINGS

Organizational demography, Kanter’s theory of tokenism, and competition theory all provide reasons to believe that the use of nonstandard workers will have a negative effect on social relations in the workplace. This chapter uses data from the 2002 NOS to examine predictions derived from all three approaches regarding the connection between the use of nonstandard workers and organizational-level reports of hostility, worker-management relations, and sexual harassment.

Each of the three theoretical approaches suggests that the connection between nonstandard workers and social relations will take a somewhat different form. Organizational demography, which focuses on in-group and out-group dynamics, implies that the mere presence of nonstandard workers may matter. Kanter’s work, in contrast, emphasizes the relative size of majority and minority groups and argues that minority groups experience the greatest difficulties when they are a very small numerical minority. This logic suggests that it is not the simple presence of nonstandard workers but rather their share of the labor force that matters. Nonstandard workers might endure the worst treatment when they are a very small minority but do better when they represent a larger proportion of workers. Finally, competition theory also suggests that the relative size of the minority and majority groups matters, but it suggests that social relations will get worse rather than better as a small minority grows in size, at least to a point. Once a tipping point is reached, social relations may start to improve again.
To test these different predictions, I present two sets of regression results. One set focuses on the presence of nonstandard workers as emphasized by organizational demography (Table 2) by using a dummy variable to contrast experiences in establishments that use nonstandard workers with experiences in establishments that do not use nonstandard workers. The reason a dummy variable is used is because organizational demography suggests that it is the mere presence (or absence) of nonstandard workers that affects outcomes. Therefore, I expect that the dummy will have a significant positive coefficient when examining hostility, employee-management relations, and sexual harassment. The second set of regressions examines whether the relative size of the nonstandard work force matters as emphasized by Kanter and competition theory (Table 3). Because Kanter and Competition Theory suggest different functional forms for the relationship between the proportion of nonstandard workers and the outcomes I examine, I measure the proportion of nonstandard workers using a set of dummy variables. This provides the equation with maximum flexibility, allowing it to fit the relationships described by Kanter and Competition Theory as well as more complicated relationships. I expect that the coefficients for the smallest proportions will be positive and significant, and decrease as the proportion increases. Both sets of regressions (i.e. Tables 2 and 3) examine the three dependent variables measuring social relations, and each dependent variable is examined with three nested regression models. The first model for each outcome is a baseline model which only includes my main independent variable (e.g. In Hypotheses 1a-c, this is the use of nonstandard workers in the organization). The second model adds organizational variables that are believed to have an effect on these outcomes, and the third model is a full model with all variables, including the controls. The effect of the main independent variable is expected to drop in significance as additional variables are included in the models. The purpose of using these nested models is to see whether
the relationship between the independent and dependent variables holds when other variables are added or when the decrease in the coefficients are explained logically by the models (e.g. when other establishment-level characteristics mediate the relationship as predicted by theory). In other words, nested models ensure that the relationship observed is not a spurious one and add internal validity to the study.

Organizational Demography: Hypotheses 1a-c: The effect of the use of nonstandard workers

Hostile Behaviors

Models 1-3 in Table 2 examine the relationship between using nonstandard workers and establishment-level reports of hostile behaviors. Since the variable for hostile behavior is measured as a dichotomous variable, using OLS regression would be problematic, as the assumptions of OLS are violated when used with a non-interval outcome variable. I therefore use logistic regression to examine my hypotheses.

Based on these findings, I conclude that the use of nonstandard workers in an establishment is positively related to hostile behaviors (Hypothesis 1a is supported). Odds ratios greater than 1 indicate a positive effect on the probability of hostile behavior at the establishment level. The odds ratio indicates that the odds of having a report of hostile behavior are 2.61 times higher for establishments that use nonstandard workers than they are for those without nonstandard workers. Hypothesis 1a is still supported after including the establishment variables that might account for the relationship (Model 2). As expected, the effect of nonstandard workers is somewhat decreased, with the odds decreasing from 2.61 in Model 1 to 1.71 in Model 2. This suggests that, after accounting for these variables, establishments utilizing nonstandard
workers are roughly 70% more likely to report hostile behaviors in the past 12 months than are establishments that do not use nonstandard workers. I also find that the log likelihood in this model improves (-276.70377), so the model has been improved by adding the independent variables. Finally, the results indicate that the hypothesis is still supported after including the controls in Model 3. Using predicted probabilities, I find that the probability of experiencing hostile behaviors for an establishment with nonstandard workers is 71 percent, with all other variables at their mean, whereas the probability is 59 percent for an organization without nonstandard workers.  

Although I did not make formal hypotheses regarding the effects of the other establishment variables in the model, existing research suggests that some organizational factors entered in Model 2 might act as perpetrators or inhibitors of hostile behavior. In particular, they might alter the effect of using nonstandard workers. I begin by examining the main effects of these variables and where applicable, the relevant interactions. Interactions between the use of nonstandard workers and the establishment factors would indicate that the effect of the use of nonstandard workers depends on these contextual factors. The use of nonstandard workers, for instance, might lead to greater hostility in an establishment where job security is low but not in one where job security is high. I would thus expect the interaction between the use of nonstandard workers and establishment-level job security to be significant.

A Wald test and a significant chi square in Model 2 indicates that the hypothesis that the combined effects of these variables are simultaneously equal to zero can be rejected at the .01

---

8 I also tried using Poisson regression to analyze hostile behavior as a count variable (of the types of hostile behaviors present) and found similar significant results. I tested for overdispersion (and the need to use a negative binomial model) but the alpha value was not significant, suggesting that a Poisson model was satisfactory. These results (not shown) are consistent with my predictions, as outlined in Hypothesis 1a, which states that the use of nonstandard workers in an establishment will be positively associated with hostile behaviors in the workplace.
level (chi-square = 37.46, p<.01). Nonetheless, many of the findings regarding the organizational context are not significant or are not in the expected direction.

The effect of establishment size is insignificant. I expected to find that, due to the greater anonymity associated with large establishments, size would be related to hostile behaviors. Nevertheless, while the log odds are positive as expected, they are not significant. In analyses not shown, I re-estimated all of the models using different measures of establishment size, including the log of establishment size, size square, as well as 4 dummy categories for different levels of size. None of these analyses changed the results.

Research and theory suggest that establishments with many layoffs and lower job security are likely to experience more hostility, as employees become resentful towards management and other employees and feel that they are unlikely to face repercussions for their behavior. As a result, I would expect to find odds that are lower than 1 for the variable that measures an establishment’s implicit or explicit commitment to its workers to avoid layoffs. In fact, I find weak evidence for the opposite effect (p=<.06). The odds of an establishment reporting hostility are 53 percent higher for those who have reassured employees there will not be layoffs than they are for establishments that have not made such a commitment. Interestingly, 33 percent of establishments have made such a commitment to their workers, and over half of those establishments use nonstandard workers. Perhaps the use of such work arrangements is what prompts many workplaces to make the commitment to their workers. Nevertheless, if part of the purpose is to avoid problems with harassment, bullying, and incivility brought on by the use of nonstandard workers, these commitments are not as effective as they would like them to be. Another reason for this unexpected finding could be that workplaces that have made such a commitment to their workers are ones already dealing with hostile behaviors in the workplace,
and do so as a way to maintain civility. Unfortunately, the cross-sectional nature of the data do not allow for examining such claims. ⁹

Because the main effect for this variable was statistically significant, I also estimated an interaction between it and the use of nonstandard workers. The interaction, however, was not statistically significant indicating that the use of nonstandard workers does not have different effects when the establishment makes a commitment to avoid layoffs. It seems that making a commitment to avoid layoffs may not matter as much as workers’ perceptions of potential layoffs and job security.

The degree of formalization is another variable with unexpected findings. Organizations with greater levels of formalization are thought to have lower levels of hostility but the findings seem to indicate the opposite. I find that the odds of hostility are 1.18 times higher for establishments with greater levels of formalization. This difference is not very large though and the positive finding may be the result of workplaces with written rules and procedures being more efficient about record keeping and more aware of instances of hostility. I also tested an interaction between this variable and the use of nonstandard workers, but it was not significant.

Although not significant, the effect of formal grievance procedures regarding disruptive behavior is in the direction suggested by previous research. The odds ratio of 0.7 implies that having such procedures lowers the odds of workplace hostility. The fact that the odds are not significant suggests that procedures alone may not be as important as the extent to which they are followed and taken seriously. Engaging in general harassing behavior also does not have the serious consequences that other types of behaviors do (e.g. sexual harassment), so formal grievance procedures regarding hostility may not act as a great inhibitor to such behavior.

⁹ These establishment variables do not change the primary variables of interest, so even if the suggested causal direction is backwards, it does not appear to bias my other results.
Formal grievance procedures regarding sexual harassment are significant though. The odds of hostile behaviors are 2.33 times higher for establishments with formal sexual harassment procedures than they are for establishments without them. On the one hand, it seems surprising that sexual harassment procedures would have any effect on general harassing behaviors. Research indicates that general hostility and sexual harassment are two distinct phenomena with separate causes and consequences. Further, any association that would be expected would be a negative one; i.e. formal grievance procedures would discourage hostile relations, not encourage them. Since the data are cross-sectional, it is impossible to determine whether this finding reflects a tendency for establishments with general workplace conflict problems to enact formal procedures regarding any type of negative behavior. Once again, testing an interaction between this variable and the use of nonstandard workers was insignificant, casting doubt on the idea that nonstandard workers are received very differently depending on the context.

Finally, research suggests that establishments using teams will have fewer instances of harassment, but I find that the odds of this variable are not significant. It is possible that they are just as likely to experience harassment because they have workers in close proximity, thus creating more opportunities for conflict among workers or between workers and management. It is also possible that contextual variables not included in the models affect both the use of nonstandard workers as well as hostile behaviors, thus suppressing the effect of using teams. The full model, including other establishment controls did not alter the findings. Multicollinearity did not seem to affect the results either.
Employee-Management Relations

Employee-management relations are measured as a 5-point ordinal variable, from 1= very good to 5 = very poor. It is not appropriate to use OLS for ordinal dependent variables because OLS assumes the distances between categories are the same (e.g. the distance between “good” and “very good” is the same as that between “good” and “neither good nor poor”). As a result, analyzing these measures using OLS would likely produce estimates of slopes and standard errors that are misleading. I also decide against coding employee-management relations as a dummy variable and using regular logistic regression as doing so would lead to a loss of information. I therefore use ordered logistic regression, which avoids the assumption that the distances between categories are equal. This type of regression estimates a series of binary outcomes simultaneously and a series of cut points and cumulative log odds of scoring at or below a threshold of employee-management relations. Slope parameters indicate changes in the distribution of responses at the cut points given a unit increase in the predictor variables.

An assumption inherent in ordinal regression is the parallel regression assumption, which indicates that the coefficients describing the relationship between the lowest versus higher categories of the response variable are the same as those that describe the relationship between the next lowest category and all higher categories. Only one set of coefficients is thus needed since the relationship between all pairs of groups is the same. I conduct a likelihood ratio test using the omodel command in Stata (this conducts an omnibus test that all of the coefficients are simultaneously equal) as well as a Brant test to test this assumption. The null hypothesis indicates that there is no difference in the coefficients between the models, so a significant result indicates that the parallel regression assumption is violated. I find that using original 5-category dependent variable violates the parallel regression assumption. Because there were few cases in
the “poor” and “very poor” categories. I tried combining those with the “neither poor nor good”
category thus making a 3-category variable. I conducted the parallel regression assumption tests
again and found that the assumption was no longer violated. I estimate the McKelvey’s and
Zavoina’s R-square since it most closely approximates that obtained by fitting the linear
regression model on an underlying latent variable. The R-square is .028 in the baseline model
(Model 4) and .155 in the full model (Model 6).

The findings lend support to Hypothesis 1b, which predicts that the use of nonstandard
workers in an establishment will be positively associated with poor relations between workers
and management. The significant odds suggest that using nonstandard workers worsens relations
between employees and management. A table of standardized estimates (not shown) provides
more information on the relationship between the presence of nonstandard workers and
employee-management relations. Holding all other variables constant (in Model 6),
organizations with nonstandard workers are .19 standard deviations higher on poor relations with
management than are organizations without them. Their odds of poor relations are also 46
percent greater than are organizations’ without nonstandard workers. As the additional variables
are included however, the significant effect is diminished.

Several other variables also have a significant effect on worker-management relations.
First, larger establishments report poorer worker-management relations. Additional analysis
suggests that a standard deviation increase in organizational size increases organizations’
likelihood of poor relations by .12 standard deviations, or boosts the odds of poor relations by 27
percent. Second, in Model 6 I find weak evidence that the commitment to avoid layoff is
negatively related to poor relations. In other words, commitment to workers is positively related
to good relations between employees and management. Such organizations are 30 percent less
likely to report poor relations. Note that the commitment to workers to avoid layoffs had the opposite effect on hostile behaviors. Even if it lowers the odds of bad relations with management, it does not seem to decrease the levels of general hostility in the workplace. Establishments with formal sexual harassment procedures or employees in unions have greater odds of experiencing poor relations between employees and management. Finally, compared to those in the service industry, establishments in public administration report poorer relations with management. As was the case with hostile behavior, testing interactions between the establishment variables and the use of nonstandard workers were insignificant, suggesting that relations with management do not significantly vary depending on the context.

Sexual Harassment

Using nonstandard workers also has a highly significant positive effect on instances of sexual harassment, as predicted by Hypothesis 1c. This effect is significant in all 3 models. The pseudo R-square increases from 0.104 in Model 7 to 0.339 in Model 9. The odds in Model 7 show that organizations with nonstandard workers are over eight times as likely to have instances of sexual harassment as are establishments that do not use nonstandard workers. Once establishment-level variables are controlled for in Models 8 and 9, the odds decrease but are still significant. Specifically, the odds of a workplace experiencing an instance of sexual harassment in the past 12 months are 4.85 times higher for establishments with nonstandard workers than they are for establishments without them. Although only 19 percent of establishments report instances of sexual harassment, over 90% of establishments with sexual harassment reports use at least one type of nonstandard worker. Furthermore, the predicted probability of an incident of
sexual harassment is over 10% for an establishment with nonstandard workers, holding all other variables at their mean.

The coefficient for establishment size is also significant. Past research suggests that the anonymity associated with large organizations acts as a perpetrator of sexual harassment. Of course, large organizations may also have better record keeping of such incidents. Yet, the effects of formalization and formal grievance procedures regarding disruptive behaviors are not significant here. The models do not include the variable for formal procedures regarding sexual harassment because the variable is a perfect predictor of the dependent variable. Whereas the first two dependent variables (i.e. hostile behaviors and employee-management relations) ask the respondent to answer based on their knowledge of such behaviors, the sexual harassment outcome is based on formal complaints, not mere incidents that they recall. As a result, it is impossible to formally report an incident of sexual harassment without formal grievance procedures. A simple crosstab indicates that there are indeed no cases of reports of sexual harassment in establishments without formal procedures.

Model 9 also finds significant effects for 3 of the industry variables. Manufacturing, trade, and public administration are significantly more likely to report incidents of sexual harassment, compared to organizations in the service industry. Past research suggests that industries that are traditionally male-dominated, such as manufacturing, are likely to have higher rates of sexual harassment. As was the case with the other two dependent variables, the relationship between the presence of nonstandard workers and variables associated with establishment context was not significant, as indicated by non-significant interactions.
Summary

Overall, Table 2 provides support for the argument that establishments with nonstandard workers have greater odds of experiencing hostile behaviors, poorer employee-management relations, and instances of sexual harassment than establishments without them. Workplace factors described in qualitative research as having an impact on these outcomes are for the most part not significant in the analyses. The degree of formalization has an effect on general hostile behaviors, but not on levels of sexual harassment or on relations between employees and management. The size of the establishment is also found to be significant when it comes to employee-management relations and sexual harassment, but it does not have an effect on hostile behavior. This provides some support for the assertion that different organizational factors affect different types of conflict outcomes. Finally, formal sexual harassment procedures are found to be significantly related to workplace outcomes. Nevertheless, interactions between these variables and the use of nonstandard workers were not significant.

The remaining tables measure nonstandard workers in different ways; for example Table 3 examines the effect of different proportions of nonstandard workers in the organization, Table 4 examines differences in the outcomes based on whether the workers are used in the core or the periphery of an organization, and Tables 5 and 6 examine differences based on what types of nonstandard workers are used. The models include all of the other establishment variables discussed above, but I will only present coefficients for these main independent variables, as the effects of establishment context do not differ based on the different ways I measure nonstandard workers.
Tokenism and Competition Theory: Hypotheses 2a-c: The effect of the relative size of the nonstandard workforce

Table 3 examines how the effect of the use of nonstandard workers varies with their proportions. Tokenism predicts that negative outcomes will decrease and relations will become more positive as the proportion of nonstandard workers increases. Competition theory predicts the opposite; it expects relations to worsen and harassment to increase as the proportion of nonstandard workers increases.

Hostile Behavior

Using logistic regression, I find that, compared to organizations with no nonstandard workers (i.e. the reference category), those where the proportion of nonstandard workers is below 20% (>0% to <5%, 5% to <10%, and 10% to <20%) have a higher risk of experiencing hostile behavior in Model 1. The odds of hostile behavior occurring are 6.77 times higher for organizations that have a proportion of nonstandard workers lower than 5% than for those who do not use any nonstandard workers. These odds become smaller as the proportion of nonstandard workers increases, indicating that smaller proportions have a greater effect on hostile behaviors than do larger proportions. Even though the odds associated with the 20% or more category are not significant, they, as well as the odds for the 10% to 20% group, are significantly different from the coefficient for organizations with the smallest proportion of nonstandard workers (>0% to <5%). As expected, the odds become smaller in Models 2 and 3, and the effect of larger proportions (i.e. 10 to <20%) loses its significance. Nevertheless, small

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10 I also tried measuring the size of nonstandard workers using a continuous variable measuring the number of nonstandard workers and the square of that variable, but the results were similar. Since the dummy variables are easier to interpret and do not need a graph to understand the relationship between the variables, I only present the dummies.
proportions are still positively related to hostile behaviors in the full model. For example, organizations whose proportion is lower than 5% have odds of hostility that are four times higher as the ones for organizations without any nonstandard workers. These findings correspond closely with Kanter’s tokenism, which predicts that such behaviors become less common as the percentage of tokens increases. Nonetheless, tokenism suggests hostile outcomes for bigger proportions as well (until tokens reach at least 15%), and I do not find that.\textsuperscript{11}

**Employee-Management Relations**

The proportion of nonstandard workers is also positively related to poor relations between workers and management, but again, it is only significant at low levels (>0% to <5%). In Hypothesis 2b, I predicted that the proportion of nonstandard workers would be related with poor relations between workers and management in a curvilinear fashion. While this finding is not entirely inconsistent with this, I expected significant results for greater proportions as well. The significant effect of low proportions is somewhat consistent with Kanter, yet tokenism predicts that outcomes will be negative until the proportion of the minority group is at least 15%. My findings suggest that once the nonstandard workforce reaches the 5% threshold, its effect on worker-management relations is negligible. Arguments from competition theory regarding increasing negative effects as proportions increase are thus not supported.

**Sexual Harassment**

I find that proportions affect sexual harassment differently than they do hostile behaviors and employee-management relations. Models 7 – 9 in Table 3 show that organizations using any

\textsuperscript{11} I do not discuss effects of the context variables as they are the same as in the table with the overall use of nonstandard workers.
nonstandard workers, irrelevant of their proportion, have greater odds of sexual harassment complaints than do organizations with no nonstandard workers. It is possible that the proportion of nonstandard workers needs to be much greater than 20% for it to not have an effect on instances of sexual harassment. Nevertheless, the size of the odds tends to become smaller as the proportion increases. These highly significant odds could also be capturing an establishment-level characteristic that significantly affects reports of sexual harassment and that is not included in the model.

Moving Beyond Proportions

The data allow me to address two criticisms associated with tokenism by examining the effects of raw numbers of nonstandard workers as well as the effect of changes regarding the use of nonstandard workers.

First I address the claim that size effects may have to do with sheer numbers, rather than proportions, by including a continuous variable of the size of the nonstandard workforce present in an establishment. I leave the proportion categories in the models to estimate whether the numbers of nonstandard workers have a significant effect on my outcomes, beyond that of proportions.

I find significant odds for this variable, suggesting that beyond the effect of proportions, the sheer size of the nonstandard workforce increases the odds of hostile relations, poor employee-management relations, and sexual harassment complaints. Further, the size variable does not change the story told by the proportion variables.

I also examine the claim that an increase in the use of nonstandard workers, rather than their present proportions, has an effect on social relations. I conduct an analysis with a set of
dummy variables that indicate whether an organization’s use of nonstandard workers has increased, decreased, or stayed the same since 1998. I find that, compared to organizations that have decreased their use of nonstandard workers, those whose use has remained the same and those who have increased their use of nonstandard workers have greater odds of hostile behavior and sexual harassment. The (continuous) size of nonstandard workers is included and is still significant in these models. Worker-management relations, on the other hand, are only affected by changes in the use of nonstandard workers when the proportion variables are not included in the analysis. Once these are accounted for, it appears that recent changed in their use has little effect on relations between workers and managers.

Summary

In summary, Table 3 suggests that small proportions have the largest effect on hostile relations, employee-management relations, and sexual harassment. As the proportion of nonstandard workers increases, the significant association between using nonstandard workers and poor relations is diminished.

The significant effect of low proportions is consistent with Kanter’s theory of tokenism. Contrary to her predictions though, I do not find significant effects for sizes larger than 5% when examining hostile behavior and employee-management relations. My findings also reject arguments made by competition theory regarding increasing negative effects as proportions increase. Interestingly enough, proportions of any size have significant effects on sexual harassment complaints. Interactions between proportion variables and establishment characteristics were not significant. Supplemental analyses suggested that beyond tokenism, the raw numbers of organizational workers have a significant effect on my outcomes. Further, there
is evidence that the extent to which an establishment has increased its use of nonstandard workers has an effect on hostile behaviors and sexual harassment, beyond that explained by proportions.

**Competition Theory: Hypotheses 3a-c: The effect of the core versus the periphery**

**Hostile Behavior**

Competition theory suggests that the use of nonstandard workers in areas more central to an organization might present a greater threat than their use in more peripheral areas. I expected that hostile behavior would be greater when establishments used workers in their core rather their periphery (Hypothesis 3a). Table 4 finds some support for this prediction, yet the odds are only significant in the initial model at the .05 level. The two odds ratios in this model refer to establishments without nonstandard workers and establishments with nonstandard workers in their core. The reference category is therefore establishments that only use nonstandard workers in the periphery. The odds are significant for both variables in Model and provide further support for the initial hypothesis that organizations with nonstandard workers will experience greater issues with hostility. Compared to organizations that use nonstandard workers in the periphery, organizations that do not use them at all are about 50 percent less likely to experience hostile behaviors. This is noteworthy as the use of nonstandard workers in the periphery is not expected to create as many problems as their use in the core. In other words, the difference between organizations that do not use them and those that use them in the core is expected to be even bigger. A Wald test suggests that the size coefficients between establishments without nonstandard workers and those with workers in the core are significantly different from each other.
In a model using establishments without nonstandard workers as the reference category, I find that establishments with nonstandard workers in their core have a larger positive effect on hostile relations than do establishments that use them in their periphery. Such workplaces are almost twice as likely to experience hostile behaviors as are ones that only use nonstandard workers in their periphery. In other words, it appears as though establishments with such workers in the core fare the worst, followed by those that use them in the periphery, and, lastly, by establishments that do not utilize nonstandard workers at all. Nevertheless, as the variables for establishment context and other controls are added, the significance of the variables is diminished. In fact, in Model 3, the coefficient for establishments without nonstandard workers is no longer significant. In other words, after accounting for the establishment context, the difference between such organizations and those that only use nonstandard workers in peripheral functions is insignificant.

**Employee-Management Relations**

Whether nonstandard workers are used in core or peripheral functions makes no difference for worker-management relations at the establishment level (Hypothesis 3b is not supported). I expected that establishments with nonstandard workers in the core would report poorer relations between managers and employees than those with nonstandard individuals working in the periphery, but the only significant results found in the table are for establishments without nonstandard workers. These establishments have lower odds of poor relations compared to establishments with nonstandard work being performed in peripheral functions. After accounting for other establishment characteristics, the odds of having “poor relations with management” are 38 percent lower for establishments without nonstandard workers than for establishments that only use nonstandard workers in their periphery. Even though I did not find
significant differences between using workers in the core or the periphery, the significant odds for organizations without any nonstandard workers suggest that even the use of external workers in peripheral areas is associated with poor worker-manager relations.

Sexual Harassment

Similar to the models for hostile behavior, the effect of the core versus the periphery is only significant in the baseline model (Model 7, Table 4), indicating that the location in which nonstandard workers are used does not have a significant effect on reports of sexual harassment. Hypothesis 3c is therefore only supported in the baseline model. As expected, the odds are also lower for establishments that do not use nonstandard workers at all, compared to those that use them in the periphery. Further testing indicates that the two coefficients (i.e. establishments without nonstandard workers and establishments with nonstandard workers in their core) are also significantly different from each other and these differences hold as the establishment controls are added. The significance for establishments without nonstandard workers still holds in the final model. Once the other variables are added in subsequent models though, the significant difference between the core and the periphery disappears.

Summary

Overall, there is only weak support for the assertion that nonstandard workers in the core will create significantly more problems than those in the periphery. In baseline models with hostile behavior and sexual harassment as dependent variables, establishments that use nonstandard workers in the core are significantly more likely than those using them in the periphery to have undesirable outcomes. This effect, however, is not significant at the .05 level
in subsequent models. Although employee-management relations are affected by the use of nonstandard workers generally, it does not matter so much where nonstandard workers are used.

**Hypotheses 4a-c: The effect of different types of nonstandard workers**

**Hostile Behavior**

Drawing on previous research, I expected that hostile behaviors would be affected by the type of nonstandard worker used in an establishment. I predicted the use of contract workers and independent contractors, to be perceived similarly, and to have a similar effect on outcomes, so I group them together using a dummy variable. I also expect direct-hire temporary workers, temporary agency workers, and on-call workers to be similar in the work they do and in their effect on establishment-level outcomes, so I group these three types of nonstandard worker together using a dummy variable. In Table 5, I compare the use of these two dummy variables (i.e. one for the use of direct-hire temporary workers, temporary agency workers, and on-call workers and one for the use of contract workers or independent contractors) and expect to find different effects on hostile behaviors (Hypothesis 4a). Not surprisingly, establishments without any nonstandard workers have lower odds of hostility than establishments using contract workers and independent contractors. Nevertheless, the type of nonstandard workers an establishment uses does not have a significant effect on the odds of hostile behavior. Although previous research, based largely on case studies, indicated that the presence of temporary workers was more likely to lead to hostile relations than the use of independent contractors, my results suggest that nonstandard workers lead to hostile relations regardless of the type that is used.

To further explore this issue, I also tried disaggregating the different kinds of nonstandard workers. The non-significant coefficient for temporary and on-call workers may be due to the
way the types of workers are grouped together. I originally group together on-call workers, direct-hire temporaries, and temporary agency workers, expecting that their presence would create more problems than the presence of independent contractors, but grouping these categories together may be inappropriate. For example, it is possible that temporary agency workers and on-call workers have different effects on behavior. I therefore repeat the analysis from Table 5 in Table 6 with variables for each type of nonstandard worker (on-call, direct-hire temp, contract worker, and independent contractor, with independent contractor serving as the reference group). These variables do not correspond with establishments that only use the specific type of nonstandard workers (e.g. temporary workers) for two reasons. First, many establishments use combinations of nonstandard workers (Kalleberg et al. 2003), so it is not practical to code the variables to contrast establishments that only use a specific type of nonstandard worker with those that only use another type of nonstandard worker. Second, measuring the variable this way reveals the pure effect of each specific type of nonstandard worker, while controlling for whether an establishment uses all other types of nonstandard workers.

Repeating the analysis with dummy variables for each type of nonstandard arrangement reveals significant effects for on-call workers and temporary agency workers in the baseline model (Table 6 Model 1). These findings are largely consistent with Hypothesis 4a that the use of temporary agency workers and on-call workers is more likely to be associated with hostile behaviors than the use of independent contractors. For example, establishments that use agency workers are twice as likely to report instances of hostility as are establishments with independent contractors. These relationships, however, are not significant at the .05 level after adding controls. Combining these findings with those from Table 2 suggests that establishments with
nonstandard workers have increased odds of hostile behavior, regardless of which type of nonstandard worker used.

**Employee-Management Relations**

The type of worker used is also not significant at the .05 level for models examining its effect on worker’s relations with management. The odds ratio for organizations that do not use nonstandard workers is significant however, indicating that they have around 50 percent lower odds of poor worker-management relations. This finding is consistent with the initial analysis that did not differentiate among the different kinds of nonstandard workers.

Disaggregating the different kinds of nonstandard workers did however lead to significant differences between the types of nonstandard workers used. For instance, the presence of on-call workers has lower odds of poor relations compared to the presence of independent contractor. This goes against my prediction that the use of on-call workers (along with the use of temporary workers) would be associated with worse relations with management (Hypothesis 4b). I also find that the use of temporary workers of any kind did not significantly impact worker-manager relations. Finally, establishments with contract workers report worse employee-management relations than do organizations with independent contractors. My initial hypothesis suggested that using contract workers would have similar effects as using independent contractors. The findings here suggest that this is not the case.

**Sexual Harassment**

Initial analyses indicate that the use of temporary and on-call workers actually lowers the odds of sexual harassment reported in an establishment (Models 7-9, Table 5). Nevertheless,
once I include dummy variables for each specific type of nonstandard worker repeat the analyses in Table 6, I find that this is not the case. After accounting for each type of nonstandard worker available, my findings suggest that establishments with direct-hire temporaries and temporary agency workers have significantly greater odds of instances of sexual harassment complaints than do establishments using independent contractors. For instance, establishments with agency workers have odds that are 3 times as high as those with nonstandard workers. While this is consistent with qualitative research, it does not provide conclusive evidence that it is the nonstandard workers who are being harassed.

Summary

Tables 5 and 6 suggests that aggregating different types of workers together can lead to misleading results regarding their effects on social relations. The latter table suggests that different types of workers have an effect on different outcomes. Specifically, on-call and contract workers increase poor relations among workers and managers, while temporary workers are linked to more instances of sexual harassment.

Discussion

The establishment-level findings are consistent with arguments made by organizational demography. For example, the mere presence of nonstandard workers has a significant positive effect on hostile behaviors, poor relations between workers and managers, and on sexual harassment complaints. These findings suggest that organizations that rely on nonstandard workers to alleviate some of their costs may do so at the expense of increased social costs. I also found that variables that were predicted to either act as guardians or perpetrators of these
behaviors had little effect on the relationship between the use of nonstandard workers and the negative outcomes.

My findings also suggest that the effects of nonstandard workers depend partly on their proportions, with smaller proportions exhibiting the largest effects on hostile behaviors, worker-management relations, and sexual harassment. This is more consistent with tokenism than it is with competition theory. Nevertheless, proportions of any size seem to influence sexual harassment complaints. The fact that the effect of proportions is diminished as the proportions grow indicates that organizations may only face increased hostile behaviors and poorer relations with management at very low levels. About 37% of establishments that use nonstandard workers use them at such low levels (less than 5%). This is a sizable minority for such a small percentage range. As a comparison, 25% of establishments have proportions of nonstandard workers between 20% - 100%. I also find that recent increases in the use of nonstandard workers affect outcomes. Organizations may thus expect negative outcome when they use nonstandard workers at low levels or when there is a recent increase in the use of nonstandard workers. Nevertheless, they might expect things to improve in terms of hostility and relations with management when they use larger proportions of nonstandard workers.

Competition theory and past qualitative research suggest that there will be more problems related to the use of nonstandard workers in the core. Nevertheless, I find that differences between the use of nonstandard workers in the core and in the periphery are not significant, suggesting that nonstandard workers anywhere in an establishment can affect social relations, and attempts to either integrate such workers into the core or isolate them to peripheral functions have little effect on these outcomes.
Finally organizations using different types of nonstandard workers may face different negative outcomes. Compared to the use of independent contractors, the use of on-call and contract workers is linked to poorer employee-management relations. As suggested by competition theory, independent contractors are less likely to be perceived as a threat to standard workers since they often add new knowledge and perform different tasks than do standard workers. On the other hand, on-call workers are similar to regular employees in the tasks they perform and may be seen as a greater threat. As a result, the use of on-call workers may create problems and hurt relations between workers and management more than the use of independent contractors. While I expected independent contractors and contract workers to have a similar effect on outcomes, my findings suggest that these two types of workers are perceived differently and that, compared to independent contractors, contract workers affect relations more negatively.

Instances of sexual harassment were also linked to different types of workers. The findings suggest that the use of direct-hire temporary workers and temporary agency workers is linked to more sexual harassment complaints. Past research on temporary workers argues that due to their low status and limited opportunities for fighting back, they are often the targets of sexual harassment. Nevertheless, the findings here only suggest that the use of temporary workers increases sexual harassment complaints, *not* that temporary workers are the targets. The following chapter on individual-level findings is able to answer the question whether it is temporary workers who are the target or whether the use of temporary workers is linked to a work environment that makes all types of workers subject to sexual harassment.
Table 2: Effect of the Use of Nonstandard Workers on Establishment-Level Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Hostile Behavior&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Employee-Management Relations&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Sexual Harassment&lt;sup&gt;3&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratios</td>
<td>Odds Ratios</td>
<td>Odds Ratios</td>
</tr>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
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<td>Organization uses nonstandard workers</td>
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<td>1.71 *</td>
<td>1.68 *</td>
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<td>1.17</td>
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<tr>
<td>Commitment to avoid layoffs</td>
<td>-</td>
<td>1.53 †</td>
<td>1.65 *</td>
</tr>
<tr>
<td>Formalization</td>
<td>-</td>
<td>1.18 *</td>
<td>1.15 †</td>
</tr>
<tr>
<td>Formal dispute resolution procedures</td>
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<td>0.62</td>
</tr>
<tr>
<td>Formal sexual harassment procedures</td>
<td>-</td>
<td>2.33 **</td>
<td>2.49 **</td>
</tr>
<tr>
<td>Establishment uses teams</td>
<td>-</td>
<td>1.02</td>
<td>0.95</td>
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<td>Industry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture/Construction</td>
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<td>-</td>
<td>0.81</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-</td>
<td>-</td>
<td>0.77</td>
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<tr>
<td>Transportation/Communication</td>
<td>-</td>
<td>-</td>
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</tr>
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</tr>
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</tr>
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<td>Conflict resolution training</td>
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<td>1.05</td>
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<td>Disruptive behavior training</td>
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<td>-</td>
<td>1.23</td>
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<table>
<thead>
<tr>
<th>R² / Pseudo R²</th>
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</tr>
</thead>
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<td>0.039</td>
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<td>0.106</td>
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<tr>
<td>0.123</td>
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<tr>
<td>0.028</td>
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<td>0.102</td>
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<tr>
<td>0.155</td>
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</tr>
<tr>
<td>0.104</td>
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</tr>
<tr>
<td>0.283</td>
<td>474</td>
</tr>
<tr>
<td>0.339</td>
<td>474</td>
</tr>
</tbody>
</table>

1. Hostile behavior is measured as a dummy variable
2. Relations are measured on a 3-point scale with higher numbers indicating poorer employee-management relations
3. Sexual harassment is measured as a dummy variable

Reference category: service industry

*** = p<.001; ** = p<.01; * = p<.05, † = p<.1
Table 3: Effect of the Proportion of Nonstandard Workers on Establishment-Level Outcomes

<table>
<thead>
<tr>
<th>Proportion of nonstandard workers</th>
<th>Hostile Behavior</th>
<th>Employee-Management Relations</th>
<th>Sexual Harassment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>&gt;0% to &lt;5%</td>
<td>6.77 ***</td>
<td>3.94 ***</td>
<td>4.01 ***</td>
</tr>
<tr>
<td>5% to &lt;10%</td>
<td>3.47 **</td>
<td>2.26 *</td>
<td>2.09 †</td>
</tr>
<tr>
<td>10% to &lt;20%</td>
<td>2.08 *</td>
<td>1.55</td>
<td>1.44</td>
</tr>
<tr>
<td>20% or more</td>
<td>1.22</td>
<td>1.09</td>
<td>1.09</td>
</tr>
<tr>
<td>Establishment size/1000</td>
<td>-</td>
<td>1.11</td>
<td>1.10</td>
</tr>
<tr>
<td>Commitment to avoid layoffs</td>
<td>-</td>
<td>1.63 *</td>
<td>1.76 *</td>
</tr>
<tr>
<td>Formalization</td>
<td>-</td>
<td>1.14 †</td>
<td>1.12</td>
</tr>
<tr>
<td>Formal dispute resolution procedures</td>
<td>-</td>
<td>0.74</td>
<td>0.66</td>
</tr>
<tr>
<td>Formal sexual harassment procedures</td>
<td>-</td>
<td>2.08 *</td>
<td>2.24 *</td>
</tr>
<tr>
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<td>1.00</td>
<td>0.93</td>
<td>-</td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture/Construction</td>
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<td>Manufacturing</td>
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<td>0.78</td>
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<tr>
<td>Transportation/Communication</td>
<td>-</td>
<td>-</td>
<td>0.33 *</td>
</tr>
<tr>
<td>Trade</td>
<td>-</td>
<td>-</td>
<td>1.01</td>
</tr>
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<td>Finance</td>
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<td>-</td>
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</tr>
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<td>Employees covered by union contract</td>
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<td>1.30</td>
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<td>Conflict resolution training</td>
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<td>1.12</td>
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<tr>
<td>Disruptive behavior training</td>
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<td>-</td>
<td>1.16</td>
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R² / Pseudo R²: 0.075, 0.123, 0.140, 0.022, 0.056, 0.083, 0.135, 0.295, 0.349
N: 474, 474, 474, 474, 474, 474, 474, 474, 474

Notes: Size coefficients that are sig different from >0% to <5% are listed in italics. Reference categories: no nonstandard workers in establishment; service industry

*** = p<.001; ** = p<.01; * = p<.05, † = p<.1
Table 4: Effect of Core vs. Periphery on Establishment-Level Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Hostile Behavior</th>
<th>Employee-Management Relations</th>
<th>Sexual Harassment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Organization does not use nonstandard workers</td>
<td>0.49 **</td>
<td>0.70</td>
<td>0.72</td>
</tr>
<tr>
<td>Organization uses nonstandard workers in core</td>
<td>1.95 *</td>
<td>1.67 †</td>
<td>1.73 †</td>
</tr>
<tr>
<td>Establishment size/1000</td>
<td>-</td>
<td>1.14</td>
<td>1.14</td>
</tr>
<tr>
<td>Commitment to avoid layoffs</td>
<td>-</td>
<td>1.53 †</td>
<td>1.64 *</td>
</tr>
<tr>
<td>Formalization</td>
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<td>1.14</td>
</tr>
<tr>
<td>Formal dispute resolution procedures</td>
<td>-</td>
<td>0.73</td>
<td>0.65</td>
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<tr>
<td>Formal sexual harassment procedures</td>
<td>-</td>
<td>2.34 **</td>
<td>2.49 **</td>
</tr>
<tr>
<td>Establishment uses teams</td>
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<td>0.93</td>
<td>-</td>
</tr>
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<td>Industry</td>
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<td>Disruptive behavior training</td>
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<td>1.25</td>
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</table>

<table>
<thead>
<tr>
<th>R² / Pseudo R²</th>
<th>0.048</th>
<th>0.111</th>
<th>0.128</th>
<th>0.029</th>
<th>0.105</th>
<th>0.158</th>
<th>0.113</th>
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<th>0.340</th>
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<tbody>
<tr>
<td>N</td>
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<td>474</td>
<td>474</td>
<td>474</td>
<td>474</td>
<td>474</td>
<td>474</td>
<td>474</td>
</tr>
</tbody>
</table>

Notes: Size coefficients that are sig different from each other are listed in italics.
Reference cateogories: organization uses nonstandard workers in periphery; service industry

*** = p<.001; ** = p<.01; * = p<.05, † = p<.1
Table 5: Effect of the Type of Nonstandard Worker Used on Establishment-Level Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Hostile Behavior</th>
<th></th>
<th>Employee-Management Relations</th>
<th></th>
<th>Sexual Harassment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1 Model 2 Model 3</td>
<td>Model 4 Model 5 Model 6</td>
<td>Model 7 Model 8 Model 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization does not use nonstandard workers</td>
<td>0.33 *** 0.53 * 0.53 *</td>
<td>0.44 *** 0.56 * 0.55 *</td>
<td>0.08 *** 0.21 *** 0.14 ***</td>
<td></td>
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Notes: Size coefficients that are sig different from each other are listed in italics.
Reference categories: organization uses contract workers/independent contractors; service industry
*** = p<.001; ** = p<.01; * = p<.05, † = p<.1
Table 6: Effect of Each Individual Type of Nonstandard Worker

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Reference categories: organization uses independent contractors; service industry

*** = p<.001; ** = p<.01; * = p<.05, † = p<.1
CHAPTER 6
INDIVIDUAL-LEVEL FINDINGS

Establishment-level findings from the previous chapter suggest that the use of nonstandard workers has a negative effect on social relations at the organizational level. Nevertheless, if we were to assume that, just because nonstandard workers erode social relations at the establishment level, they are the victims, we would be making an ecological fallacy. Therefore, in order to determine who the victim is, different types of analyses must be conducted. Organizational demography and past qualitative studies can be used to make predictions regarding outcomes at the individual level. This chapter uses data from the 2002 GSS to examine whether nonstandard workers are more likely than standard workers to experience hostile behaviors, poor worker-management relations, and sexual harassment. The unit of analysis is thus the worker rather than the establishment.

I conduct separate models and present odds ratios for each of my three outcomes, as I did in Chapter 5. The first outcome is hostile behavior and examines whether nonstandard workers are more likely than other workers to experience hostility. Since it is measured as a dichotomous variable, I use logistic regression to examine hostility. I then use ordered logistic regression to examine whether standard and nonstandard worker differ in their reports of worker-management relations. Finally, I conduct logistic regression to test the claim that nonstandard workers are more likely than standard workers to experience sexual harassment.
Hostile Behavior

Drawing on organizational demography, Kanter’s theory of tokenism, and competition theory, I hypothesized that nonstandard workers would be more likely than standard workers to report being victims of hostile behavior, but my analysis does not support that prediction. The dummy variable identifying respondents as nonstandard workers is not significant even when it is the only independent variable in the model (results not shown). In fact, the odds ratio is lower than 1, suggesting that standard workers may actually have lower odds of reporting hostile behavior. In light of the findings from the establishment level analysis, this suggests that although the use of nonstandard workers increases the odds of hostile behavior in an establishment overall, we cannot reject the claim that standard and nonstandard workers are equally likely to be the targets of such behavior.

Remarkably few worker or establishment characteristics in the full model are significant predictors of hostile behavior. Formal sexual harassment procedures is the only one significant at the .05 level, indicating that working in an establishment with such procedures makes it more likely that a worker will report experiencing hostile treatment. The odds are marginally significant at the .1 level for job security, establishment size, and the manufacturing industry, and show that these decrease the chances of being threatened on the job.

Furthermore, additional tests indicate that establishment level variables do not alter the relationship between nonstandard worker status and reports of hostile behavior. Competition theory suggests that nonstandard workers may be treated differently depending on the establishment context. Nonstandard workers, for instance, might face higher odds of hostile treatment in establishments with low job security, where they might be perceived as a substantial threat to standard workers, than they do in establishments with high job security. To test this
idea, I created interactions between being a nonstandard worker and the establishment variables I expected to affect social relations at the establishment level (e.g. formalization, grievance procedures etc.). The interactions, however, were not statistically significant, indicating that being a nonstandard worker does not have different effects depending on these establishment variables (results not shown). Therefore, Hypothesis 5a is not supported. Although the use of nonstandard workers is associated with hostile behaviors at the establishment level, meaning that the use of nonstandard workers erodes organizational interaction overall, nonstandard workers are apparently not more likely than other workers to be the targets of such behaviors. This non-significant finding is an important one, as one might assume that nonstandard workers are indeed the targets just from the establishment-level analysis. Studies that have examined organizational outcomes, without having access to individual-level data, may have mistakenly made this ecological fallacy.

**Employee-Management Relations**

Table 7 uses ordered logistic regression to examine the claim that nonstandard workers are less likely than standard workers to experience poor relations with management (Hypothesis 5b). The establishment-level results lend support to the notion that relations with managers are eroded when organizations use nonstandard workers. I predicted that standard workers’ relations with management are more likely to suffer, so I examine this claim by examining the effect of being a nonstandard worker on employee-management relations using a dummy variable.

The previous chapter described the assumptions of ordered logistic regression and the need to test for the parallel regression assumption. A likelihood ratio test using Stata’s omodel command and a Brant test indicate that at the individual level, the parallel regression assumption
is violated when using the 5-category dependent variable for relations. However, as was the case at the establishment-level, the parallel regression assumption is upheld when using a 3-category variable that combines the “poor” and “very poor” categories with the “neither poor nor good” category. Consequently, I proceed with the 3-category dependent variable. This variable is also advantageous as it allows me to measure worker-management relations in the same way in this analysis as I did in the establishment level analysis.

The odds in Model 1 suggest that work status is significantly related to worker-management relations. Specifically, nonstandard workers are less likely than standard workers to report poorer relations with management. Additional information provided by standardized estimates for Model 1 (not shown) suggest that nonstandard workers are .37 standard deviations lower on poor worker-management relations than standard workers (lower odds indicate better relations with managers). Their odds of having poorer relations with management are also 50 percent lower than those of standard workers’. A reason for this finding is that nonstandard workers who seek permanent employment have something to gain by having pleasant relations with managers, who may have a lot of say into whether they are hired on a permanent basis. Research suggests that nonstandard workers are also less likely than standard workers to expect a lot from management or to feel that their psychological contract has been violated (George 2003).

This finding is significant, even after including controls for personal and job characteristics. The standardized estimates change only slightly in Model 2, which includes personal characteristics, and in Model 3, which add job characteristics. For example, in Model 2 the odds of poorer relations are 49 percent lower for nonstandard workers than for their standard counterparts. The indicator variable for nonstandard worker, however, loses significance in the full model (Model
4) with establishment variables. This suggests that after accounting for establishment-level characteristics, the effect of being a nonstandard worker is not significant and that nonstandard workers are not any less likely than standard employees to have poorer relations with management. Establishment-level variables may therefore be more important in explaining worker-management relations than is work status. This suggests that the type of contract one has with an establishment does not affect the worker’s relations with management once contextual factors, such as management’s commitment to avoid layoffs, are accounted for. I also find that workers who are in large establishments and those with formal sexual harassment procedures have greater odds of poorer relations with management, while a commitment from managers to avoid layoffs decreases the odds of bad worker-management relations (not surprising, yet only significant at the .1 level). Finally, there is evidence that relations between employees and management are poorer in establishments where some employees are covered by a union contract.

**Sexual Harassment**

The previous chapter found that the presence of nonstandard workers is highly linked to instances of sexual harassment. Authors such as Rogers (1995) suggest that nonstandard workers often experience sexual harassment on their assignments. Assertions from organizational demography also suggest that nonstandard workers will be targets of such behavior. Consequently, I predicted that nonstandard workers would be more likely than standard workers to experience sexual harassment. As shown in Table 8, however, this hypothesis (Hypothesis 5c) was not supported. Since the main effect of being a nonstandard worker is not significant in the reduced versions of this model, I present only the full model. Not surprisingly, women are almost
five times as likely as men to say that they have been sexual harassed in the past 12 months (odds = 4.91). An additional analysis separating the results by gender to examine whether there are differences between female and male nonstandard workers failed to reach significance though. Once again, I also conducted supplemental analyses that included interactions between nonstandard worker status and establishment-level variables, such as grievance procedures, but the interactions were not significant.

Table 8 provides some evidence that sexual harassment is less common among those who are college-educated, have higher job security, and work as part of a team (p<.1). Working as part of a team is often thought of as a guardian against sexual harassment, and higher education and job security often increase one’s status in an organization. Those with high status are typically less vulnerable to sexual harassment, so these findings are not surprising. However, the odds for workers in the highest-income category are somewhat unexpected. Table 8 suggests that the odds of experiencing sexual harassment are seven times higher for those making over $60,000 than for those with the least income (i.e., less than $10,000). This finding contradicts the notion that workers with higher incomes should be less vulnerable to sexual harassment because they typically have higher status. Still, another explanation may be derived from competition theory, which argues that individuals who are perceived to be potential threats are likely to be subject to negative treatment. High earners, and particularly female high-earners, are likely to be seen as potential threats.

As an additional check of the individual level outcomes for hostile behavior and sexual harassment, I estimated special logistic regression models that are designed for handling rare events. Being a victim of either hostile behavior or sexual harassment is relatively rare at the

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12 The only significant finding in that analysis found that, for women, working in a team greatly reduced their odds of being sexual harassed.
individual level. 13 percent of the sample report being threatened or harassed within the past year. This percentage corresponds with other research on general workplace harassment that suggests between 10 – 20% of all workers are bullied or harassed (e.g. Einarsen et al. 2003). Sexual harassment is less prevalent, with 5 percent of respondents stating that they have been sexually harassed on the job in the past 12 months. Logistic regression often underestimates the probability of such rare events (i.e., outcomes with many more 1s than 0s, or the reverse, on the dependent variable). As a result, I conducted two additional analyses (not shown) with hostile behaviors and sexual harassment as the dependent variables using the relogit command in Stata. This command corrects for small sample and rare events bias present in a logit model. Re-estimating the models using this command, however, produced the same outcomes I found using regular logistic regression. Nonstandard workers did have slightly lower odds of being threatened, but this was only significant at the .1 level and was only found in a model that did not include the establishment-level controls. Once these variables were included in the model, this effect disappeared completely.

I also conducted analyses to determine if the experiences of nonstandard workers depend on the presence of other nonstandard workers in the establishment. Theories on group size assert that the experiences of workers depend on their proportions. For example, Kanter suggests that tokens are particularly likely to face negative outcomes when their proportions are low. I test this claim by examining the effect of being a nonstandard worker as the proportion of nonstandard workers in an establishment increases. I test this by including dummy variables for the proportion of nonstandard workers and creating interactions between being a nonstandard worker and proportions. The results indicate that hostile behaviors and sexual harassment are not affected by the proportion of nonstandard workers in an establishment. In other words, although
proportions affect hostility and sexual harassment at the establishment level, they do not affect the likelihood of an individual worker experiencing hostility or sexual harassment. Kanter’s tokenism specifically highlights role entrapment and social isolation as consequences of being a token. Although I suggested that tokenism would have similar effects on workers’ outcomes like hostility and sexual harassment, these outcomes are more severe, and may not be explained by her theory. Such outcomes are more likely to be addressed by competition theory, which discusses outcomes such as discrimination. Nevertheless, even discrimination outcomes may be qualitatively different from sexual and general harassment. Hypotheses 6a–c are not supported.

**Discussion**

These individual-level results are surprising given the assumptions of organizational demography and the findings from case studies that highlight the negative experiences of nonstandard workers. The individual-level analyses here suggest that nonstandard workers are not any more likely than standard workers to be threatened or sexually harassed on the job.\(^\text{13}\)

The findings presented here are not completely inexplicable. The issue, for instance, may be one of comparison groups. Qualitative studies tend to examine the experiences of nonstandard workers and find that they report being victims of general and sexual harassment. The same studies, however, do not typically examine the experiences of standard workers, who could also be threatened or harassed by other workers. It is possible to imagine a scenario in which the use of nonstandard workers has an effect on hostility in the workplace but that this is

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\(^{13}\) A minor check on the consistency between establishment-level and individual-level reports on hostility and sexual harassment did not lead to new insights. 5% of workers reported being either the victim of hostile treatment or sexual harassment but were in establishments that reported no such instances. Creating new variables for hostility and sexual harassment at the establishment level using the information from such workers did not significantly change any of my findings.
spread throughout the organization, with both regular and nonstandard workers being victims or perpetrators of it. If standard workers are resentful of the fact that they have to deal with the consequences of working with nonstandard workers, they may take out their frustration on anyone who is readily available, including other standard workers. In terms of sheer numbers, there are more standard than nonstandard workers who can be potential victims. Further large-scale research should examine more closely who is more likely to be the perpetrator and victim of such behaviors.

The findings presented here may also reflect subjective perceptions of sexual harassment and the ways they can be influenced by context. Much of the discussion surrounding general and sexual harassment suggests that their definitions depend on the organizational context. Workers’ perceptions of these behaviors may also depend on their work status. Just as some workers consider sexualized behaviors a normal part of their job but see the same behavior as sexual harassment in other contexts, some nonstandard workers may put up with and define behaviors differently than standard workers. Nonstandard workers who do not have the same access to grievance procedures as other employees may learn to not even define these behaviors as hostile or as sexual harassment. Indeed, they may be encouraged to do so. There is some evidence that temporary agencies, for example, often try to convince temporary workers to not be sensitive and make a big deal out of “nothing”, teaching them to redefine potentially negative behaviors as normal (Rogers and Henson 1997).

The non-significant results may also be partly due to the fact that all types of nonstandard workers were grouped together. Just as the use of different types of nonstandard workers makes a difference on establishment-level outcomes, the effect on individual-level outcomes may differ based on the type of nonstandard worker. Temporary workers, for instance, may be at greater
risk of sexual harassment than independent contractors not only because of their lower status but also because of their location on-site. Unfortunately, I could not examine these issues using the GSS data. Separating the variable for nonstandard worker into dummy variables for different types of nonstandard workers left cells with very few numbers, making it impossible to conduct regressions.

It is also possible that the length of time an organization has been relying on nonstandard workers influences the experiences of workers. Nonstandard workers in organizations that have been using nonstandard workers for a long time may not suffer from any negative effects, as their category becomes normalized. Organizational demography suggests that workers are placed in in-groups and out-group, and it is possible that, over time, nonstandard workers become less of an out-group. Unfortunately, these data cannot examine this claim. Ideally, the data would be collected for establishments over time to examine whether the effects of being a nonstandard worker differ depending on how long an establishment has been employing such workers. The data do however allow me to examine whether individual effects in establishments that have increased or decreased their use of nonstandard workers in the past 4 years. Supplemental analyses indicate that standard workers report poorer worker-management relations in establishments that have increased their use of nonstandard workers (compared to establishments that have decreased their use or whose use has stayed the same). An interaction between nonstandard worker and whether the establishment has increased their use of nonstandard workers is significant and suggests that the relationship between work status and worker-management relations depends on recent changes regarding the use of nonstandard workers at the establishment level.
Finally, the variables for hostile behaviors at the individual and establishment level are not identical. The question at the establishment level included the less severe outcomes of incivility and discourteousness. These outcomes are not examined at the individual level, so if nonstandard workers are treated rudely, this measure would not capture this. It is entirely possible that nonstandard workers are treated rudely, as suggested by qualitative studies, but that this negative behavior does not often reach the level of being hostile or sexually harassing, hence the non-significant results. Unfortunately, the GSS does not have a good measure of these less severe outcomes.

Summary

Although the use of nonstandard workers has a significant and negative effect on social relations at the establishment level (see chapter 5), the individual-level results presented in this chapter indicate that it is not necessarily nonstandard workers who are the victims of hostility and sexual harassment. Rather, the use of nonstandard workers tends to affect standard and nonstandard workers equally. Qualitative case studies suggest that this is not the case, but more quantitative research is needed to further examine whether these results hold on a large scale. The individual-level results did however lend support for the argument that standard workers have poorer relations with management than do nonstandard workers. As past studies have shown, relations between standard workers and their supervisors tend to suffer when organizations use nonstandard workers (e.g. Broschak and Davis-Blake 2006), especially if they feel as if their psychological contract has been violated.

14 Creating a new establishment-level variable for hostility that did not include incivility did not alter the establishment-level findings in any way.
Table 7: Effect of Being a Nonstandard Worker on Hostile Behavior

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<td>$20,000 to &lt; $40,000</td>
<td>1.97</td>
</tr>
<tr>
<td>$40,000 to &lt;$60,000</td>
<td>2.24</td>
</tr>
<tr>
<td>$60,000+</td>
<td>1.47</td>
</tr>
<tr>
<td>Belongs to a union</td>
<td>1.57</td>
</tr>
<tr>
<td>Length of time at current job</td>
<td>1.01</td>
</tr>
<tr>
<td>Job security</td>
<td>0.76 †</td>
</tr>
<tr>
<td>Works as part of a team</td>
<td>0.87</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
</tr>
<tr>
<td>Managerial/Professional</td>
<td>1.50</td>
</tr>
<tr>
<td>Technical/Sales/Administrative</td>
<td>1.36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Establishment Characteristics</th>
<th>Odds Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment size/1000</td>
<td>0.77 †</td>
</tr>
<tr>
<td>Org. provides commitment to avoid layoffs</td>
<td>0.90</td>
</tr>
<tr>
<td>Formalization</td>
<td>1.05</td>
</tr>
<tr>
<td>Formal dispute resolution procedures</td>
<td>0.58</td>
</tr>
<tr>
<td>Formal sexual harassment procedures</td>
<td>3.92 *</td>
</tr>
<tr>
<td>Industry</td>
<td></td>
</tr>
<tr>
<td>Agriculture/Construction</td>
<td>0.97</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.22 †</td>
</tr>
<tr>
<td>Transportation/Communication</td>
<td>-</td>
</tr>
<tr>
<td>Trade</td>
<td>1.20</td>
</tr>
<tr>
<td>Finance</td>
<td>0.38</td>
</tr>
<tr>
<td>Public administration</td>
<td>2.12</td>
</tr>
<tr>
<td>Employees covered by union contract</td>
<td>1.26</td>
</tr>
<tr>
<td>Conflict resolution training</td>
<td>1.62</td>
</tr>
<tr>
<td>Disruptive behavior training</td>
<td>0.73</td>
</tr>
</tbody>
</table>

| McFadden's $R^2$ | 0.138 |
| N               | 469   |

1. Hostile behavior is measured as a dummy variable
Reference categories: less than $10,000; service occupation; service industry

*** = p<.001; ** = p<.01; * = p<.05, † = p<.1
Table 8: Effect of Being a Nonstandard Worker on Relations with Management

<table>
<thead>
<tr>
<th>Nonstandard worker</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-</td>
<td>0.91</td>
<td>0.92</td>
<td>0.97</td>
</tr>
<tr>
<td>White</td>
<td>-</td>
<td>0.88</td>
<td>0.91</td>
<td>1.19</td>
</tr>
<tr>
<td>Age</td>
<td>-</td>
<td>0.99</td>
<td>0.98†</td>
<td>0.98*</td>
</tr>
<tr>
<td>Some college and above</td>
<td>-</td>
<td>1.14</td>
<td>1.32</td>
<td>1.17</td>
</tr>
<tr>
<td>Job Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$10,000 to &lt; $20,000</td>
<td>-</td>
<td>-</td>
<td>1.32</td>
<td>1.52</td>
</tr>
<tr>
<td>$20,000 to &lt; $40,000</td>
<td>-</td>
<td>-</td>
<td>1.29</td>
<td>1.21</td>
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<tr>
<td>$40,000 to &lt;$60,000</td>
<td>-</td>
<td>-</td>
<td>1.77†</td>
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<td>-</td>
<td>-</td>
<td>0.79</td>
<td>0.80</td>
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<tr>
<td>Belongs to a union</td>
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<td>-</td>
<td>1.15</td>
<td>0.67</td>
</tr>
<tr>
<td>Length of time at current job</td>
<td>-</td>
<td>-</td>
<td>1.01</td>
<td>1.01</td>
</tr>
<tr>
<td>Job security</td>
<td>-</td>
<td>-</td>
<td>0.91</td>
<td>0.91</td>
</tr>
<tr>
<td>Works as part of a team</td>
<td>-</td>
<td>-</td>
<td>1.09</td>
<td>1.18</td>
</tr>
<tr>
<td>Occupations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial/Professional</td>
<td>-</td>
<td>-</td>
<td>0.75</td>
<td>0.59†</td>
</tr>
<tr>
<td>Technical/Sales/Administrative</td>
<td>-</td>
<td>-</td>
<td>1.13</td>
<td>1.12</td>
</tr>
<tr>
<td>Establishment Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establishment size/1000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.14**</td>
</tr>
<tr>
<td>Org. provides commitment to avoid layoffs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.66†</td>
</tr>
<tr>
<td>Formalization</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.04</td>
</tr>
<tr>
<td>Formal dispute resolution procedures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.03</td>
</tr>
<tr>
<td>Formal sexual harassment procedures</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.26*</td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture/Construction</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.16</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.09</td>
</tr>
<tr>
<td>Transportation/Communication</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.53</td>
</tr>
<tr>
<td>Trade</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.79</td>
</tr>
<tr>
<td>Finance</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.60</td>
</tr>
<tr>
<td>Public administration</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3.14**</td>
</tr>
<tr>
<td>Employees covered by union contract</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.28**</td>
</tr>
<tr>
<td>Conflict resolution training</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.87</td>
</tr>
<tr>
<td>Disruptive behavior training</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.62†</td>
</tr>
</tbody>
</table>

McKelvey's and Zavoina's $R^2 $ | 0.01 | 0.01 | 0.03 | 0.10 |

N | 464 | 464 | 464 | 464 |

1. Relations are measured on a 3-point scale with higher numbers indicating poorer employee-management.

Reference categories: less than $10,000; service occupation;

*** = p<.001; ** = p<.01; * = p<.05, † = p<.1
Table 9: Effect of Being a Nonstandard Worker on Sexual Harassment

<table>
<thead>
<tr>
<th></th>
<th>Sexual Harassment&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Odds Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonstandard worker</td>
<td>1.02</td>
<td></td>
</tr>
</tbody>
</table>

**Personal Characteristics**
- Female: 4.91 **
- White: 2.79
- Age: 0.98
- Some college and above: 0.39 †

**Job Characteristics**
- Income:
  - $10,000 to < $20,000: 0.82
  - $20,000 to < $40,000: 1.81
  - $40,000 to < $60,000: 1.65
  - $60,000+: 7.19 *
- Belongs to a union: 0.29
- Length of time at current job: 0.97
- Job security: 0.64 †
- Works as part of a team: 0.44 †
- Occupation:
  - Managerial/Professional: 1.81
  - Technical/Sales/Administrative: 0.26 †

**Establishment Characteristics**
- Establishment size/1000: 0.88
- Org. provides commitment to avoid layoffs: 0.85
- Formalization: 0.95
- Formal dispute resolution procedures: 0.45
- Formal sexual harassment procedures: 1.05
- Agriculture/Construction: 0.76
- Manufacturing: 0.23
- Transportation/Communication: -
- Trade: 1.13
- Finance: 2.36
- Public administration: 3.70 *
- Employees covered by union contract: 0.93
- Conflict resolution training: 0.97
- Disruptive behavior training: 0.27

McFadden's R<sup>2</sup> = 0.180
N = 464

---

1. Sexual harassment is measured as a dummy variable
Reference categories: less than $10,000; service occupation; service industry

*** = p<.001; ** = p<.01; * = p<.05, † = p<.1
CHAPTER 7

CONCLUSION

Concluding Remarks

In an effort to respond to fluctuations in demand, increase their flexibility, and lower payroll costs, many organizations increasingly hire nonstandard workers (Kalleberg et al. 2000; Houseman, Kalleberg, and Erickcek 2003; Golden and Appelbaum 1992). Although this may help organizations save money in some areas, the reduction in expenses may be accompanied by an increase in other, often overlooked, costs. Research has shown that the use of a nonstandard workforce can lead to increased hostility, poorer relations with management, and increased levels of sexual harassment. Our understanding of why and when these outcomes occur, however, is still quite limited. Most studies have been qualitative or only examine one type of nonstandard worker (e.g. Garsten 1999; Ang and Slaughter 2001; Barley and Kunda 2001). Existing quantitative studies tend to be based on non-representative samples (e.g. Pearce 1993). Further, most previous research has solely focused on practical rather than theoretical contributions.

This dissertation is the first, to my knowledge, to provide a large-scale, multi-level examination of the connection between the use of nonstandard workers and social outcomes such as hostile behaviors, relations between employees and management, and experiences of sexual harassment. It therefore adds to the literature which identifies social costs of nonstandard work arrangements. It also provides an examination of organizational demography’s ability to explain outcomes related to the use of nonstandard workers by arguing that nonstandard work status is a salient characteristic that defines people as belonging to an out-group.
Using data from the 2002 National Organizations Survey (NOS), I found that establishments with nonstandard workers have greater incidents of hostile behaviors, poorer employee-management relations, and more instances of sexual harassment than establishments without nonstandard workers. I also found that these outcomes are affected by the proportion of nonstandard workers in an establishment. Specifically, the results show that small proportions have the largest effect and, as the proportion increases, the negative effect is diminished. Recent increases in the use of nonstandard workers also affect these outcomes.

This study also extends previous research by considering the effect of nonstandard workers in the core versus the periphery of an establishment as well as the effect of different types of nonstandard workers. Although I expected that nonstandard workers in the core would be seen as a bigger threat and have a larger negative impact on social relations, this finding was only supported in baseline models. In other words, the use of external workers anywhere in the establishment, and not just in the core, can create problems in terms of hostility, worker-management relations, and sexual harassment. Finally, I found that different types of workers have an effect on different outcomes. Specifically, on-call and contract workers lead to poorer relations among workers and managers, while temporary workers are linked to more instances of sexual harassment, a finding supported by case studies (e.g. Rogers 1995).

This study also suggests that establishment variables have an effect on the outcomes. For example, I found that job security as measured by an establishment’s commitment to avoid layoffs, had an effect on hostile relations, but not on any of the other outcomes. Surprisingly it increased the odds of hostile relations, perhaps indicating that organizations with problems of hostility are more likely to make this commitment to maintain civility. Establishments which explicitly made this commitment to their workers were also more likely to use nonstandard
workers. Formal sexual harassment procedures also had a significant and positive effect on hostile behaviors and on poor worker-manager relations. Although one would expect that formal procedures would mitigate such outcomes, it is likely that these procedures were enacted after having to deal with negative workplace behaviors. I also found that larger establishments also reported greater difficulties with worker-management relations and sexual harassment, but did not appear to fair worse in terms of hostile behaviors.

New information was provided about the relative experiences of standard and nonstandard workers by using linked data from the General Social Survey (GSS). In establishments using nonstandard workers, standard workers have poorer relations with management than do nonstandard workers, perhaps due to their resentment of having to work alongside nonstandard workers. Also, although the use of nonstandard workers was associated with greater hostility and sexual harassment at the establishment level, I found that it was not necessarily nonstandard workers who were the targets of hostility and sexual harassment. Furthermore, while tokenism and competition theory suggested that the experiences of individual nonstandard workers would depend on the presence of other nonstandard workers in an establishment, I did not find support for that prediction at the individual level. Rather than making the assumption that nonstandard workers bear the brunt of the outcomes examined at the establishment-level, this study is unique in its ability to examine the effects of individuals in those establishments.

These individual-level results do not correspond with those from qualitative studies, but the differences highlight important areas for future research. In part, the differences may reflect the tendency for qualitative studies to highlight hostile treatment of nonstandard workers only, while typically ignoring possible similar treatment of standard workers. The differences may also
reflect different subjective perceptions regarding hostility and sexual harassment held by the two types of workers. More qualitative and quantitative research is needed to further examine my finding that the use of nonstandard workers is associated with poorer social relations among all workers rather than just poor outcomes for nonstandard workers.

**Empirical Limitations**

While using the linked NOS and the GSS samples allowed me to examine establishment and individual outcomes, it did have some limitations. The number of nonstandard workers in the data was small, leading to tests of low power. There were also too few nonstandard workers to examine whether different types of nonstandard workers have differences experiences. Findings from the establishment-level analysis suggest that the type of nonstandard worker used has an effect on social relations. Future research should attempt to identify differences in outcomes between different types of nonstandard workers at the individual level. It is possible that some types, such as temporary agency workers, are more likely to experience negative treatment. Future research should also examine how various groups contribute to the worsening of social relations. I was not able to distinguish whether the increases in sexual harassment and hostility are linked to the behaviors of nonstandard workers, standard workers, or supervisors.

The NOS and GSS surveys also present respondents at the establishment and individual with slightly different questions. For example, respondents at the establishment level report formal complaints of sexual harassment in the NOS, while respondents for the GSS report experiences of the event. The establishment and individual data correspond well only to the extent that the manager is aware of the relevant worker behavior. Nonstandard workers may not be very likely to report issues to managers if they feel that doing so will not help their situation.
This would result in lower reports of instances at the establishment level. However, this should not affect the question regarding their experiences in the GSS. Therefore, it seems unlikely that the weaker findings at the individual level reflect underreporting at the individual level compared to the establishment level.\textsuperscript{15}

Unfortunately, the data only include one worker in each establishment and one manager who responds to establishment-level questions. Ideally, there would be several respondents in each establishment, allowing for within-group comparisons of outcomes. This lack of detail within establishments is probably the trade-off made to obtain a nationally representative sample of establishments.

Finally, the data are cross-sectional so I cannot always draw firm conclusions about causality. While the argument presented is that the presence of nonstandard workers affects social relations, it is not possible to know whether nonstandard workers causes these relations or whether firms choose to rely on external workers when there are already problems with their standard workforce. I did find however, that, compared to establishments that maintained or decreased their use of nonstandard workers over the past year, establishments that increased their use of nonstandard workers faced significantly more problems. Future research should attempt to establish the time order of these changes. It would also be useful to examine whether workers gradually adjust to these changes so that their effects diminish over time.

\textsuperscript{15} In fact, there were 9 cases of workers who reported being the victim of hostile treatment but whose establishments reported no instances of hostile treatment. There were also 20 cases of workers who were sexually harassed on the job but were in establishments that reported no sexual harassment complaints over the past year. Creating new variables for hostility and sexual harassment at the establishment level using the information from these workers did not significantly change any of my findings.
Practical Significance

The findings are important due to their practical implications for managing a workforce that is likely to see an increase in the number of nonstandard workers. Previous research has emphasized how nonstandard work arrangements can have negative social consequences for nonstandard workers. I find, however, that standard workers and managers are also affected. Organizations considering utilizing nonstandard workers may have to consider doing so at the expense of hostility and poor social relations. They are especially likely to face these negative outcomes when they use nonstandard workers at very low levels or right after an increase in their use of such workers. They also have to consider the possibility that different types of nonstandard workers may be more problematic. For example, my findings showed that the use of temporary workers is linked to greater sexual harassment complaints than is the use of independent contractors. Management should consider these costs and their effects on other outcomes, such as morale, satisfaction, and turnover intentions. They should also be concerned with the potential for lawsuits in the case of increased sexual harassment complaints.

Finally, organizations ought to consider the potential negative effects that poor relations with their workers can have and find ways to improve their relations with the permanent workforce. For example, they can ensure that using nonstandard workers will not place uncompensated demands on their standard workers. Perhaps revealing their rationale for using nonstandard workers, rather than have employees assume that the organization intends to replace them with nonstandard workers at some point, might also lead to more positive relations. Nevertheless, the perceptions of standard workers may remain unchanged. For example, George (2003) found that standard workers had low levels of trust in organizations that brought in nonstandard workers, even though the organizations had not faced any form of layoffs and
nonstandard workers were only brought in to deal with increased demand for products. Finally, managers should consider the effect of organizational practices and exclusionary policies that treat nonstandard workers as peripheral and that reinforce status distinctions between workers.

Considering that the majority of individuals spend a good portion of their lives in the labor force, it is important to examine how changes in the nature of work, affect social relations. As organizations adopt team-based forms of production (Hodson 2001), different types of workers will increasingly interact with each other. This study suggests that using nonstandard work arrangements comes at a cost of increased hostility, sexual harassment, and more negative worker-manager relations, so organizations should consider ways to mitigate these negative effects if they want to increasingly rely on such work arrangements.

**Theoretical Contributions**

This study also extended theories on group size by suggesting that group dynamics related to groups which differ in work status can function in similar ways as those which differ in ascriptive characteristics. The findings suggest that Kanter’s theory of tokenism needs to be slightly modified though, in order to explain outcomes related to the use of nonstandard workers. While the general shape of the curve suggested by the theory holds in the establishment-level analysis, finer categories are more appropriate than the ranges proposed by Kanter, since organizations that are made up of 50% nonstandard workers are not as likely as those which have 50% women.

However, the proportion of nonstandard workers had little effect on the experiences of individuals. This could be due to the fact that the proportions examined here are of all nonstandard workers in an establishment, not those of an individual’s work group. Kanter
examined small work groups, while this study attempted to modify the theory to explain proportions of nonstandard workers used in the whole establishment. While these proportions did affect outcomes at the establishment level, it appears that they do not significantly affect the experiences of individuals. Perhaps Kanter’s theory would thus have the best predictive power in very small establishments.16

My findings also have implications for research on organizational demography. I examined the possibility that organizational demography, which typically does not discuss characteristics such as employment status, can explain outcomes related to the use of nonstandard workers. Although I am not able to directly examine the in-group/out-group perceptions of workers, I find that controlling for establishment-level variables does not alter the association between negative social relations and the use of nonstandard workers at the establishment level. The fact that organizational demography, which has typically examined ascriptive differences among individuals, can be used to examine differences that are created in a workplace, suggests that the theory can be used to examine other groups, beyond work groups, that differ on other non-ascriptive bases.

Nevertheless, predictions from organizational demography did not seem to hold at the individual level. Future quantitative research should attempt to empirically measure the underlying in-group and out-group processes suggested by the theory to determine whether they explain outcomes at the individual level. They should also account for the possibility that, while in-groups and out-groups can lead to hostile behaviors, it is not always out-group members who are the victims. Lower status and other out-group characteristics do not guarantee that out-group members have no chance to fight back or be hostile in return.

16 About 50% of establishments examined have fewer than 50 employees and a third of establishments have fewer than 10 employees.
A reason why organizational demography may not be able to explain the individual-level outcomes may be that the unit of analysis of the theory is typically the group, rather than the individual. In other words, organizational demography describes differences between groups, so it may be better able to describe processes that occur on a group level, but not processes affecting specific individuals.

Since organizational demography fares better at explaining outcomes occurring at the establishment-level, rather than explaining the experiences of the individuals within them, it might be a worthwhile theory for organizational theorists who examine outcomes such as organizational growth, the diffusion of organizational forms, and failure. As I described above, organizational demography does not only have to apply to ascriptive differences, so researchers examining differences in groups, organizations, and industries can use the theory when examining differences in aspects such as values, customs, and even work policies.

Finally, this study suggests that organizational demography can help explain attitudes such as relations with management, as well as actual behaviors, such as hostility and sexual harassment, at the establishment level. A lot of research on organizational demography focuses on attitudinal outcomes, such as the job satisfaction of Whites when they work with Blacks. This study suggests that the processes involved in organizational demography can help explain violent outcomes as well.

Overall, the theories used in this study are rooted in research on racial and gender relations, yet do a good job of explaining establishment-level outcomes associated with the use of nonstandard workers. This suggests that they can be used in other contexts besides studying race and gender. I attempted to use the theories to explain outcomes at different levels. While they did a good job of predicting what happens at an establishment level, they did not do as well
in explaining outcomes at the individual level. Hence, other theories that move beyond in-
groups and out-groups are necessary to explain the experiences of standard and nonstandard
workers.
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