IN-GROUPS AND OUT-GROUPS IN THE WORKPLACE: THE IMPACT OF
THREAT ON PERMANENT EMPLOYEES' INTERACTIONS WITH TEMPORARY
CO-WORKERS

DISSERTATION

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ABSTRACT

Organizations are increasingly regarding temporary employees as a critical part of their personnel strategies. The surge in temporary employment has made this segment of the workforce an important area of study, yet because of the recency of this phenomenon, there is limited research about the temporary employee population. The research that does exist suggests that temporary workers have largely negative effects on permanent employees, but this work does not shed light upon the psychological causes of these costs. This dissertation studied some of the consequences, both positive and negative, of a blended workforce (a workforce that includes regular, full-time workers employed by a company as well as temporary workers who are working on site at the host company but are employed by third parties). The goal of this dissertation was to address the dearth of knowledge by directly examining the mechanisms that cause temporary workers to have a negative impact on the permanent workforce. This dissertation explored which conditions are likely to lead a blended workforce to have negative outcomes, why these conditions lead to negative outcomes, and how these conditions exert their impact.

Several factors were hypothesized to directly and indirectly influence the behaviors that permanent employees exhibit toward their temporary co-workers. Specifically, the organization's perceived motives and policies with regard to temporary employee usage were predicted to influence how threatened permanent employees feel by the presence
of temporary co-workers. This perception of threat was predicted to influence the biases that permanent employees show with regard to their temporary co-workers. These biases, in turn, were expected to influence the behaviors that permanent employees exhibit toward their temporary co-workers. Finally, permanent employees' perceptions of whether their temporary co-workers are voluntary or involuntary were expected to be directly related to their behavior.

Participation by employees was secured by asking representatives from a large variety of organizations to bring a small packet of surveys back to their organization. These representatives then passed the packet on to supervisors who completed one survey and distributed the two remaining surveys to a permanent employee and a temporary employee (when applicable). A coding scheme was used that enabled the supervisor to be matched with the permanent and temporary employee. A total of 117 supervisors, 99 permanent employees and 62 temporary employees responded to the questionnaire.

The results revealed that employees felt more threatened to the degree that the perceived layoff policy and motives for using temporary workers were deemed inappropriate, and employees felt more threatened when the position of temporary employees was equal to or above their own rank. Feeling threatened, in turn, made permanent employees more likely to show explicit in-group biases, although threat did not affect the degree to which they showed implicit in-group biases. Implicit and explicit biases were uncorrelated with one another, and implicit biases predicted whether the temporary employees reported that they were treated negatively by their permanent co-workers, whereas explicit biases predicted whether the permanent employees reported that they treated the temporary employees negatively. Finally, when permanent employees perceived their temporary co-workers to be working in a temporary capacity involuntarily they treated the temporary employees more positively,
and this result was moderated by threat. That is, permanent employees who did not feel threatened treated involuntary temporary employees better, but permanent employees who felt threatened treated voluntary temporary employees better.

The current research provides support for a model in which organizational factors lead to perceptions of threat, which in turn leads to inter-group biases on the part of permanent employees, which in turn causes them to think and act negatively toward their temporary co-workers. It remains for future research to determine how to interrupt this downward spiral, and thereby allow organizations to reap the full benefits of a blended workforce.
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There are a number of people whom I would like to thank for their help, not only with this dissertation, but throughout my graduate training. First and foremost, David Greenberger has served as my primary adviser throughout graduate school. David has allowed me to learn by doing, has facilitated my education by sheltering me from the typical problems that beset a graduate student, and has helped me formulate my ideas by challenging me each step of the way. Similarly, Rob Heneman, who has unofficially acted as an adviser as well, has also looked out for me during my graduate training. Furthermore, he has taught me a great deal about HR by going out of his way to involve me in a number of interesting projects which have been integral to my graduate training. Finally, Steve Mangum, although increasingly busy with his administrative duties, has always been accessible. Indeed, Steve was patient enough to allow me to write our first paper while providing me with extensive feedback along the way. I am quite certain that he could have written the paper on his own in half the time, but the experience has proven invaluable for me. David, Rob and Steve have also been valuable contributors on this project, as this work stems directly from previous work that we have done on temporary employees. Additionally, one of the findings in this dissertation that I find most exciting was one that I had not planned to test, but was going to discuss only hypothetically until Rob encouraged me to include it formally in this dissertation.

Many other people have also helped me with this project. Marilynn Brewer discussed various aspects of this dissertation with me and was incredibly helpful with
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FIELDS OF STUDY

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CHAPTER 1

INTRODUCTION

"According to the emerging work paradox, in a post-job world, the only viable long term career is to be a temporary employee" (Caulkin, 1995).

Temporary work is a phenomenon that may reshape business and personal lives in the near future by replacing full-time employment (Allerton, 1996). The temporary help industry has grown more than 350% since 1982 (Boroughs, 1994), with over two million American temporary employees working on any given day (Managing Office Technology, 1996). Although figures concerning the exact number of temporary workers vary, researchers agree that outsourcing is one of the hottest areas in employment (Larson, 1996). Indeed, double digit profit growth has been the norm recently for the largest temporary agencies (Brandstrader, 1996).

Given this significant growth, it follows that many organizations are increasingly regarding temporary employees as a critical part of their personnel strategies (von Hippel, Mangum, Greenberger, Heneman, & Skoglund, 1997). In fact, case studies have revealed that some positions within organizations are staffed only with temporary employees (see von Hippel et al., 1997). The surge in temporary employment has made this segment of the workforce an important area of study, yet because of the recency of this phenomenon, there is limited research about the temporary employee population.
In this document, I propose to study some of the consequences, both positive and negative, of a blended workforce (by blended workforce I am referring to a workforce that includes regular, full-time workers employed by a company as well as temporary workers who are working on site at the host company but are employed by third parties). To achieve this end, I first discuss background research about temporary workers, distinguishing them from other contingent workers. Second, I discuss reasons why organizations rely on the temporary segment of the workforce. Third, I review reasons why people choose to work as a temporary employee, given the desirability of permanent employment. I then review the limited literature addressing the consequences of temporary employees working alongside permanent employees. I then outline the purpose of the proposed research and why it is important for organizations. To complete the introduction to this research, I finally review various models of staffing, as the organization’s decision whether to use temporary employees ideally should be a strategic staffing decision.

*Alternative Employment Arrangements And The People Who Choose Them*

The term contingent worker is very broad in scope, in that it refers simply to a job that is not expected to last or one for which a contract (implicit or explicit) for ongoing employment does not exist (U.S. Department of Labor, 1997). Thus, “contingent worker” is not a term that describes the quality of the employee, but only the type of working relationship the employee maintains with the employer. Many terms have been coined to describe this relationship, such as peripheral workers, just-in-time employees, and the shadow workforce, and these terms can refer to temporary workers, independent contractors, on-call workers, etc. Unfortunately, the terminology has not been used consistently to describe this fast growing segment of the workforce, and thus it has become increasingly difficult to determine how many people
are working in this capacity. In light of this linguistic problem, the United States
Department of Labor utilizes three alternative statistics to estimate the actual number of
contingent workers.

A typical example of the variance associated with the terminology used to describe
contingent workers can be seen in research conducted at AT&T. AT&T has a
department called Resource Link that operates as an internal temporary agency. The
employees of Resource Link, who work at both managerial and technical levels, are
given assignments as needed, although they are full-time, permanent employees in the
company. Nevertheless, in the research on these employees, they are referred to as an
"internal contingent workforce" (Smither, 1995). There is nothing inherently wrong
with this label, of course, but it serves as a typical example of the failure to agree on
consistent labels in research on contingent workers.

In the current research, temporary workers are defined as those individuals who are
paid by a temporary agency, which in turn provides employees on demand for
companies that require them. Temporary employees typically work for only a limited
duration of time, although that duration can range from a single day to a matter of
years. In contrast, on-call workers are employees who are called to work only when
needed, but they are hired directly through the company rather than by a third party
vendor such as a temporary agency (U.S. Department of Labor, 1997). Independent
contractors, on the other hand, are typically self-employed (U.S. Department of Labor,
1997). For example, a free-lance worker or consultant would be considered an
independent contractor. Other possibilities include employee leasing, facilities
management, or payrolling (Tansky & Veglahn, 1995). For example, many companies
engage in facilities management to handle peripheral activities, such as data processing,
guard services, or cafeteria services. In these circumstances another organization
provides the employees and is responsible for the service as well.
Not only are there different patterns of contingent work, but there are different patterns of temporary work as well. Temporary employees may work year-round or seasonally and their temporary work may be their primary job or a second job (Feldman, 1995). For example, college students may work as temporary employees only during Christmas break or over summer vacation (Feldman, 1995). Finally, temporary employees may work in this capacity voluntarily or involuntarily (see Ellingson, Gruys, & Sackett, in press; Feldman, 1995; von Hippel et al., 1997). This distinction is discussed in more detail later in this chapter.

As is almost always the case when there is disagreement over terms, it can be problematic when temporary workers are not distinguished from other types of contingent workers (who themselves are often categorized with part-time workers). A variety of important differences exist between these various types of workers. For example, most independent contractors report being satisfied with their work arrangement (84%) while far fewer temporary employees do (59%; U.S. Department of Labor, 1997). This particular discrepancy would probably be even greater when considering temporary employees who are working in this capacity involuntarily. Thus, the conclusions from research that does not distinguish among types of contingent workers can be misleading at best, and occasionally categorizes individuals together who are quite discrepant on the variable of interest.

Nevertheless, despite the fact that there are many different types of contingent workers, there are some demographic differences between contingent workers in general (including temporary employees) and permanent employees. For example, women are more likely than men to be employed contingently (NATS, 1995). Additionally, contingent workers tend to be younger than non-contingent workers (NATS, 1995; U.S. Department of Labor, 1997). Finally, contingent workers are more likely to be in school than their non-contingent counterparts (NATS, 1995; U.S.
Department of Labor, 1997). Consistent with the arguments made above, however, these generalizations do not apply to all categories of contingent workers (e.g., independent contractors).

Organizational Benefits of Temporary Employee Use

Numerous reasons have been cited in the literature for organizational usage of temporary employees, from filling in for absent permanent employees to avoiding the perception of wage inequity. These reasons can be divided into three general categories: cutting costs; increasing flexibility; and avoiding restrictions/consequences (von Hippel et al., 1997).

Cutting costs: The most frequently cited reason for using temporary employees is to reduce wage and benefit costs. Typically, temporary employees do not receive the same wages as permanent employees doing the same work (Coates, 1997). Although this wage differential is partially offset by the fee that the organization pays to the temporary agency, the savings from reduced employee benefit costs are often substantial. Consistent with this reasoning, a positive relationship has been documented in a large number of organizations between average fringe benefit level and the ratio of temporary to total employee use (Mangum, Mayall, & Nelson, 1985). In addition, even when pay rates for temporary workers are not necessarily lower, money can be saved by only hiring them for a brief period of time. For example, some organizations that cannot afford to hire chief financial officers (CFO’s) on a permanent basis have begun utilizing temporary CFO’s (Messember, 1994). The temporary CFO’s are able to bring key financial leadership and insight to an organization for a limited time, and therefore at a much smaller cost than a permanent CFO (Futurist, 1997).
Use of temporary employees can affect costs other than wages as well. Organizations may save money on training-related costs by hiring temporary employees who were trained elsewhere for the tasks they will be performing (Caudron, 1994). Temporary employees may also reduce organizational costs of recruiting and testing. For example, hiring from temporary worker ranks can serve as a screening tool for the organization, and thus lower selection costs (Pfeffer & Baron, 1988). Such a strategy has been employed by organizations such as Hancock Information Group, where 39% of their permanent employees began as temporary employees. Similarly, Universal Tax Systems typically brings in 40 temporary employees prior to their busy season, of whom 10 to 20 are hired permanently afterwards (INC, 1995). Indeed, 70% of employers in a Robert Half International Survey said that they had hired a temporary employee for a permanent position after having seen the temporary employee “in action” (Management Accounting-London, 1997). Finally, organizations may save on administrative overhead because the temporary agency is typically responsible for processing the employee paychecks and attending to paperwork associated with employment (Davis-Blake & Uzzi, 1993).

The organization may also gain or save indirectly by using temporary employees. Savings may accrue if temporary employees work harder in the hopes of gaining permanent employment, exerting indirect pressure on the permanent employees. National statistics suggest that temporary employees’ productivity levels can exceed those of permanent employees by one and one quarter hours per day (Office, 1991). Temporary employees can also serve as a constant reminder to the permanent employee that their jobs can also be contracted out. Thus, temporary employees may motivate extra effort on the part of the permanent work force. Of course, productivity or morale may also be reduced by such threats, whether they are explicit or implied.
**Increasing Flexibility:** Increased flexibility is another frequently cited reason for why organizations use temporary employees. Fluctuations in output demand may be more effectively dealt with by temporary, rather than permanent employees (Kochan, Smith, Wells, & Rebitzer, 1994). Such flexibility would be particularly attractive where the corporate culture favors employment security for permanent employees. Rather than laying off permanent workers, the organization may rely upon judicious use of temporary workers to respond to transitory fluctuations in output demand. Indeed, in a twist on this strategy, Lancaster Laboratories avoids layoffs during the slow season by having their employees work as temporary employees outside the organization during their off months (Greco, 1997).

Temporary employees can also allow organizations greater flexibility in distributing the workforce. That is, labor input can be adjusted by moving the temporary employees to different parts of the organization to meet current demands. Such a strategy may not be feasible with permanent employees, as changes in their job descriptions may be considered a violation of an implicit or explicit employment contract. The use of temporary workers may also enable the organization to provide better customer service by offering extended hours at a reasonable cost.

Temporary employee use may also enhance flexibility by enabling the organization to focus permanent employees' efforts on core competencies, while having temporary workers perform more peripheral work. This approach has the potential to reduce structural differentiation within the permanent work force and thereby make integration easier among employees, as they develop a shared set of values, orientations, and activities as a result of focusing on the organization's core competencies (Lawrence & Lorsch, 1967). Temporary workers can also facilitate organizational access to skill flexibility by providing highly specialized functions, that while necessary, are infrequently recurring, or for which need is periodical or unpredictable. Finally,
temporary employees may be willing to do things that permanent employees will not (Datamation, 1996). For example, permanent employees may be unwilling to perform tasks that fall outside of their job description (Kochan, Smith, Wells, & Rebitzer, 1994). In contrast, temporary employees would be hired precisely to perform these tasks.

Avoiding Restrictions and Consequences: Organizations may also be motivated to use temporary employees to avoid potentially negative consequences of permanence in employment relationships. For example, organizations can avoid building commitment to a large number of permanent workers and subsequently having to fire unneeded workers. Such a strategy has been particularly attractive in the aftermath of the extensive downsizing that took place in many industries in the early 1990’s. Finally, it has been speculated by union officials that organizations may use temporary employees as an attempt to avoid unionization (Kochan, Smith, Wells, & Rebitzer, 1994; Pfeffer & Baron, 1988).

Organizations may also avoid certain legal liabilities associated with permanent employees (e.g., illegal discharge) by using temporary workers. Documentation of compliance with labor protection laws can be off-loaded through the use of temporary employees, as compliance often becomes the responsibility of the employing temporary agency (e.g., the temporary agency is responsible for all employment taxes such as FICA, FUTA, SUTA). Furthermore, organizations are less open to wrongful termination suits when dismissing temporary employees. The organization, however, is still responsible for its own actions. For example, the organization can be sued for violations under Title VII of the Equal Employment Opportunities Act, and is responsible for compliance with all OSHA (Occupational Safety and Health Act) regulations, as the organization has control of the worksite. Importantly, the organization’s legal responsibilities have not been completely specified as of yet, and
thus, an "arm's length" approach has been suggested when supervising temporary employees (Tansky & Veglahn, 1995). For example, in a recent ruling involving Microsoft, it was determined that temporary employees who had been with the company for a certain length of time were to be afforded the same benefits as permanent employees.

Organizations may also find it easier to hire temporary employees, as they can often avoid budget constraints that may be in place for permanent hires. For example, in many state and federal agencies authorization is necessary to hire a new employee. Often, however, these organizations have discretionary budgets that are not subject to the same kinds of authorizations and constraints. Thus, if a department cannot hire a permanent employee, it may be able to contract out the work by hiring a temporary employee. Additionally, organizations may be under pressure to keep their personnel allocations down. By hiring a temporary employee they are able to achieve this goal, as the costs are not permanently incorporated into the base budget.

Organizations may also access the temporary work force to avoid perceptions of wage inequity among their permanent employees. For example, companies that pay above market wages may contract out those activities that can be staffed at lower relative salaries. Through the use of temporaries, this may be done without damaging the organization's reputation as a high wage provider. Alternatively, organizations may decide to contract out high paying activities (e.g., consulting) so as to avoid pressure to up-grade the current internal wage scale. It has been argued that by cutting overall employment costs, temporary employees enable organizations to provide permanent employees with greater job security and fatter pay checks (Davis-Blake, George, & Broshak, 1994).

In summary, the literature offers three primary reasons for why organizations use temporary employees; cutting costs; increasing flexibility; and avoiding restrictions and
consequences. A large body of evidence supports these three reasons for organizational use of temporary employees, and case studies with organizations that rely extensively on temporary employees provide evidence that is consistent with this classification scheme as well (von Hippel et al., 1997).

*Individual Reasons to Work as a Temporary Employee*

Although organizations have strong incentives to hire temporary employees, these incentives do not address the issue of why the employee would choose to work in a temporary capacity. The desirability of permanent employment has been well ingrained in our culture, and permanent employment typically provides workers with better salaries, benefits, and a greater level of job security than temporary employment (Golden & Applebaum, 1992). Why, then, would anyone choose to work in a temporary capacity?

Although there are a large number of idiosyncratic reasons why people work as temporary employees, the literature defines a few critical factors. Specifically, temporary employees work in such a capacity because: they cannot obtain a permanent job, they value the flexibility that temporary employment offers, they value the variety that temporary employment offers, and/or they value the skills and training provided by temporary positions (Golden & Applebaum, 1992; Mendenhall, 1993; Tetrault, 1994; von Hippel et al., 1997). At a broader level, one could classify this list of reasons to propose that some people work as temporary employees because they prefer various aspects of the job (such as flexibility and variety), whereas others work as temporary employees because they have only limited opportunities to do otherwise (Feldman, 1995; Nardone, 1986).
In our previous work, we explored the implications of this classification of temporary employees (von Hippel, Greenberger, Mangum, Heneman, & Skoglund, in press). Specifically, we dichotomized temporary employees based upon their beliefs about the degree of choice they have to work as a temporary employee. Those employees who perceive themselves as having no choice but to work as a temporary employee were classified as “involuntary” temporaries, whereas those who believed they were with a temporary agency by choice were classified as “voluntary” temporaries (see also Ellingson et al., in press; Feldman, 1995; Feldman, Doerpinghaus, & Turnley, 1995). This classification appears to be meaningful in that voluntary temporary employees have different sources of satisfaction, commitment and personal control than involuntary temporary employees (von Hippel, et al., in press).

Feldman and his colleagues have proposed a similar distinction (Feldman, Doerpinghaus, & Turnley, 1994, 1995). In their research they have found that temporary employees who work in a temporary capacity by choice have more positive job attitudes than involuntary temporaries. Additionally, temporary employees who work in positions consistent with their expertise, and who are not trying to convert their temporary position into a permanent one, also show more positive job attitudes. Ellingson et al. (in press) also explore whether temporary employees who work in this capacity voluntarily are more satisfied than their involuntary counterparts. They found that both univariate and multivariate indices of “voluntariness” were comparable in predicting satisfaction among temporary employees. Voluntary temporary employees were more satisfied than involuntary temporaries with temporary work, whereas no differences emerged between voluntary and involuntary temporary employees with regard to growth satisfaction, co-worker satisfaction, or supervisor satisfaction. Additionally, no relationship emerged between performance and the voluntary/involuntary distinction.
Almost all workforces are blended in some important ways. For example, there are often regional and divisional differences within a company, and differences in job description, training level, pay, and demographics to name just a few. These sorts of blended workforces are unlikely to create the same sorts of problems and opportunities created by a blend between temporary and permanent workers, however, because all of these workers accept and endorse the common in-group identity provided by the company that employs them (see Brewer, W. von Hippel, & Gooden, in press). In contrast, the blend of temporary and permanent workers brings people together who may share no common in-group identity at all. This lack of a bond between workers has the potential to create prejudice and conflict between groups, which in turn can be exacerbated by the inherent differences in status that exist between permanent and temporary workers (see Pettigrew, 1998).

The limited research that does exist suggests that temporary workers have largely negative effects on permanent employees. Permanent employees often resent the presence of temporary employees, feeling that their work is not up to par, which then forces the permanent employee to compensate for the temporary workers' poor performance (Smith, 1994). Permanent employees who work alongside temporary employees are also more likely to unionize than permanent employees who do not work in a blended environment (Davis-Blake, George, & Broschak, 1994), suggesting that they are concerned about management's intentions regarding their job security. In support of such an interpretation, these employees had worse relations with management than employees who did not have temporary coworkers.

Blended workforces also reduced permanent employees' intentions to remain at their job (Davis-Blake, Waller, & Ammeter, 1995). Interestingly, in this study, these effects were limited to the presence of temporary medical employees, whereas the
effects did not emerge when temporary clerical employees were blended into a medical workforce. Davis-Blake et al. explain this finding by suggesting that when temporary workers are used in the “technical core” it is more disruptive for permanent employees. They propose that the permanent workers may be required to “teach” those temporary employees before they can do their own jobs, which in turn increases the work load of permanent employees. Although not mentioned by Davis-Blake, it also seems likely that temporary medical employees might also have posed a greater threat to the perceived job security of permanent employees working within the company’s technical core. Consequently, temporary medical employees may have had a more disruptive effect on the permanent employees’ morale and their perceptions of the company’s commitment to them.

Such findings concerning the negative consequences of a blended workforce led Porter (1995) to distinguish the situations under which contingent workers are appreciated by permanent employees (NOTE: this study lumps all contingent workers together). She proposed a four-quadrant matrix, in which contract workers’ performance is crossed with the organization’s motives for using them. The optimal situation emerges when the organization’s perceived motives for using contingent workers are virtuous (e.g., trying to alleviate stress on overworked employees) and when contingent employees are perceived as working effectively. In situations such as this, the attitudes of permanent employees who work with contingent workers were equally positive as those employees who do not work in a blended environment. In contrast, when the organization’s motives for using contingent workers are deemed inappropriate (e.g., using contingent workers to cut costs, or hiring temporary employees as a first step in replacing permanent workers), and when contingent workers’ performance is not up to par, the attitudes of those employees who work in a blended area were much more negative than those employees who do not.
Interestingly, when high performing contingent workers co-exist with poor motives on the part of the organization, the permanent employees may begin to feel threatened. As Porter (1995) notes, “Why retain more expensive regular employees unless they perform better?” (pg. 18). In sum, it seems that certain employees’ attitudes are negatively impacted when they work alongside contingent workers. Under such circumstances, the benefits of contingent workers may be offset by the resultant costs.

*Psychological Mechanisms*

Although the current literature on temporary employees delineates a variety of costs associated with a blended workforce, there is little work that bears upon the psychological causes of these costs. What is it about a blended workforce that disrupts the performance and morale of permanent workers, and why? At this point we can conjecture about the psychological mechanisms underlying the disruptive effects of a blended workforce, but there is no research that has directly measured the mediation of this problem. The goal of this dissertation is to address this dearth of knowledge by directly examining the mechanisms that cause temporary workers to have a negative impact on the permanent workforce. Specifically, this dissertation explores which conditions are likely to lead a blended workforce to have negative outcomes, explores why these conditions lead to negative outcomes, and explores how these conditions exert their impact. In so doing, both job attitudes and behaviors of permanent employees towards their temporary co-workers are assessed.
Importance for Organizations

It seems clear that organizations have a variety of reasons for relying on temporary employees and thus creating a blended workforce. Some of these interests coincide with the interests of their employees (e.g., alleviating over-worked, stressed employees), and some do not (e.g., cutting costs), but all of them require the right set of circumstances for the benefits to be realized. For example, the benefits of temporary employee usage will not be realized if they negatively impact the performance of permanent workers. In addition, temporary employees themselves have a variety of motivations for working in a temporary capacity, and again some of these motivations coincide with the goals of their employers and some do not. For example, temporary employees who are hoping to gain a permanent job may be poorly suited to an organization that is increasingly relying upon temporary workers in order to avoid committing to permanent workers. As is the case with permanent employees, the benefits of temporary employment may not be realized if the characteristics of the job are not in alignment with the goals of the temporary employees.

A better understanding of temporary and permanent workers, and their interactions, might lead to more effective use of the temporary workforce by the organization. When the goals of the organization, the temporary employee, and the permanent worker are in harmony with one another, it seems likely that all will benefit from the inclusion of temporary employees in the workforce. However, when the goals of the organization and temporary and permanent employees are inconsistent with one another, or are perceived to be inconsistent with one another, the data suggest that the benefits of a blended workforce may be reduced substantially, and may be outweighed by the costs.

The goal of this dissertation is to investigate the consequences of a blended workforce by examining factors that influence the intergroup relations between
permanent and temporary workers in a blended workforce. Several factors are hypothesized to directly and indirectly influence the behaviors that permanent employees exhibit toward their temporary co-workers. Specifically, the biases that permanent employees show with regard to their temporary co-workers, and whether they perceive temporary employees as voluntary or involuntary, should be directly related to their behavior. Additionally, beliefs regarding temporary employee type and the organization's motives and policies with regard to temporary employee usage are predicted to influence how threatened permanent employees feel by the presence of temporary co-workers. This perception of threat is predicted to indirectly affect the behaviors that permanent employees exhibit toward their temporary co-workers.

The over-riding concern of this dissertation is that permanent employees' attitudes may be negatively affected by working with temporary employees. For example, permanent employees may begin to question the organization's intentions when it hires temporary workers. If these intentions are deemed inappropriate by permanent workers, they are likely to feel threatened by the presence of temporary workers. This perception of threat would be exacerbated if permanent employees also believe that temporary employees are desirous of their jobs. Under this situation permanent employees may behave in a negative fashion toward the temporary employees. In addition, permanent employees may also be resentful of the additional work of "training" the new temporary employee. This strain would be exacerbated when new temporary employees enter the organization daily.

These possible sources of friction between permanent and temporary workers may counteract the benefits that organizations are reaping through judicious use of temporary employees. For example, if permanent employees withhold pertinent information that is required for the temporary worker to complete his assignment, the performance of temporary workers will be compromised. Thus, a more complete
understanding of the dynamics between temporary and permanent workers may enable organizations to deal more effectively with problems that arise from the use of temporary workers.

*Models Of Staffing Organizations*

As discussed earlier, there are a variety of reasons why organizations might use temporary workers. For each of these reasons, however, temporary workers are only one of several options (Cappelli, Bassil, Katz, Knoke, Osterman, & Useem, 1997). For example, to increase flexibility an organization might hire temporary employees or it might decide to train employees for multiple jobs within the organization so they can be shifted to various parts of the organization as the need arises. Alternatively, the organization may decide to have a certain number of “floaters” who are trained in multiple areas and can be shifted throughout the organization wherever the need arises. Despite the ample choices at an organization’s disposal, the vast majority of organizations are expanding their options by turning to the temporary workforce. That is, organizations are choosing to staff themselves with a growing number of temporary workers. The decision to rely upon the temporary workforce is a staffing decision, typically made in conjunction with Human Resources (HR). As such, this section is devoted to a discussion of staffing and the various models of staffing organizations.

Staffing, a critical component of organizational functioning, is the process whereby the individual and the organization mutually determine whether a match for the employment relationship is feasible (Heneman, Heneman, & Judge, 1997). There are several implications of this definition of staffing from Heneman and his colleagues. The more traditional view of staffing focused only on the match from the organization’s perspective. In contrast, this more recent view addresses both the organization and the individual in the staffing process. Both are viewed as “active players” in this mutual
process of staffing organizations. Just as organizations can determine who they are interested in hiring, individuals can determine which organizations they are interested in working for by adding themselves to or removing themselves from the selection process. Of course, the organization’s view is paramount in most models of staffing, but it should not be considered to the exclusion of the individual.

Also inherent to this definition of staffing is the idea that it is not an isolated event, but rather a process involving interrelated activities. Specifically, the staffing process is made up of recruitment, selection, decision making and finally, job offers. Once a decision is made to make a new hire, candidates for the position must be recruited. That is, potential applicants must be identified and convinced to apply. This stage of staffing is followed by various selection activities (e.g., interviews, personality tests) that are used to evaluate the various applicants. Finally, an offer is made and the applicant must decide whether to accept or reject the offer. Thus, the hiring of an applicant is the final point of a multi-stage process.

From an organizational perspective, staffing has the capacity to influence critical goals of the organization, such as survival, profitability and growth. Because the choice to hire temporary employees is a staffing decision that is often made with these bottom-line concerns in mind, a discussion of various staffing models is central to the understanding of when and how organizations will utilize temporary employees. Consequently, a brief overview of the various staffing models is presented. The presentation of these models begins with the oldest and most specific model (i.e., person/job match) and continues to recent, more encompassing models.

**Person/Job Match:** This staffing model seeks to “match” the characteristics of the job with those of the applicant. The achievement of such a match is thought to result in various desired outcomes, such as higher performance and retention of the job candidate. The person/job match must be made at two levels for a hire to result. First,
the requirements of the job must suit the knowledge, skills, abilities, and other characteristics (KSAOs) of the applicant. Second, the rewards (e.g., autonomy, commission) of the job must suit the applicant's motivation (e.g., need for autonomy, preference for pay to be based on performance). This second match should not be ignored in favor of the first match. Although it is critical for an individual to be able to meet the demands and requirements of the jobs, it is also important that the rewards should match the employee's motivation. Attraction and retention of the applicant are both predicated on the rewards/motivation match.

The belief inherent to this model is that if a reciprocal match can occur, positive HR outcomes will result. The concepts encompassed in this model have been used for decades in an effort to explain how individuals successfully adapt to their work environment. It is important to recognize, however, that this matching process is only one influence on HR outcomes. Clearly, HR outcomes are multiply determined, but a good match can start the organization and employee in the right direction.

**Person/Organization Match:** Although an applicant's KSAOs and motivation may match the job requirements, more recently researchers have become concerned with how well the person matches the organization more generally (Bowen, Ledford, & Nathan, 1991). This reorientation can be considered a focus on hiring people, rather than KSAOs. This approach is necessarily more elaborate than the traditional person/job match. Although the person/job match is at the heart of the matching process, four other areas are also of interest. These include organizational values, job duties, multiple jobs, and future jobs. These concerns represent the explicit understanding that people's jobs in the organization are likely to change over time. Thus, a good fit between the organization and the candidate is an important addition to the required good fit between the target job and the candidate.
Staffing System Components: This model outlines the various stages of staffing organizations. The process begins with the interaction between the organization and the applicant, which although typically balanced, may be more one-sided. For example, an organization may target their recruitment to a specific applicant pool. Alternatively, an individual may concentrate her efforts on gaining entree to a specific organization. Nevertheless, the applicant and the organization are both participants in the ongoing staffing process.

The first stage of staffing is recruitment, whereby individuals and organizations try to identify and attract possible matches for their needs. In this regard it is similar to dating, where the two parties attempt to find and then attract each other. The organization may try to attract applicants through techniques such as job fairs, advertising, or word of mouth. It seems that the most effective recruitment strategies come from current employees of the organization (Taylor & Giannantonio, 1993). As such, organizations may offer incentives to employees who successfully bring applicants to the attention of the organization. Of course, the applicant also plays the recruitment game. By reading job ads, working with an employment agency, or simply mass mailing her resume to potential employers, the applicant tries to identify organizations that have desirable job opportunities available.

The identification and attraction stage of recruitment leads to the selection stage of staffing, where the primary goals are assessment and evaluation. The organization uses a variety of techniques to assess the level of fit between the KSAOs required for the job and the general philosophy of the organization, with those of the applicant. From these evaluations a level of person/job fit or person/organization fit is determined. Simultaneously, the applicant also tries to assess his fit with the job and the organization. Again, this process is mutual as the applicant can self-select himself out of a job that he views as unattractive.
Once the selection phase is complete, it is time for the organization and the applicant to engage in decision making and final match activities. Only a subset of applicants will become finalists for the job, and it is during the employment phase of the staffing process that a decision is made about which applicant(s), if any, to extend a job offer. The details of the extended offer are also determined at this stage of the staffing process. For the applicant, if an offer is not extended, there is obviously no decision required about whether to accept or reject the offer. If an offer is made, however, negotiation issues may become relevant depending on the content of the offer. The organization's and applicant's final decision in the employment stage is based on the quality of the remuneration as well as the assessed fit of the person and the job or organization.

Although recruitment, selection and employment have been presented as discreet stages, it is important to note that the boundaries between these three stages are unclear. For example, recruitment of the applicant is likely to occur throughout the entire staffing process until an extended offer is accepted. Of course, recruitment is more dominant in the staffing process at the early stages, while the employment and selection stages become more critical as the process continues to unfold. Nevertheless, a clear demarcation where one stage ends and the next one begins is unlikely to exist.

* **Human Resource Management:** This model portrays the role of staffing within the broader framework of human resource management. The heart of the model is the person/job match. All HR activities are considered as they impact this match, which in turn directly impacts a variety of HR outcomes. The HR activities can be classified as either support activities (e.g., job analysis, measurement), which do not directly impact the person/job match, or functional activities (e.g., compensation, training and development), which directly impact the person/job match and ultimately HR outcomes. The support activities provide the background and framework for the functional
activities and enhance the effectiveness of staffing activities. Although the functional activities are typically administered separately within an organization, they are highly inter-related and must be properly integrated to achieve hiring goals. Finally, the model recognizes the presence of external influences (i.e., economic conditions, labor markets, labor unions, and laws and regulations) that are thought to affect the HR activities, person/job match, and HR outcomes.

**Staffing Organizations:** This model, developed by Heneman and his colleagues (Heneman et al., 1997), is based on the Staffing Components Model and the Human Resource Management Model that were previously discussed. Staffing is conceptualized as being composed of support activities (i.e., strategy and planning, job analysis, measurement), staffing activities (i.e., recruitment, selection, and employment), external influences (i.e., economic conditions, labor markets, labor unions, and laws and regulations), and staffing systems management (i.e., integrating the various staffing activities previously discussed, which is primarily controlled by HR). Importantly, this model recognizes the interaction and complexity among the support activities, staffing activities, and external influences in their effect on the matching process. For example, the external influences are recognized as affecting the support activities and staffing activities. Although each organization will have its own “staffing model,” the Staffing Organizations Model shows the common elements among various organizational practices.

An organization must also develop its staffing strategy with regard to the hiring of temporary employees. That is, a decision must be made about how to acquire and deploy the temporary workforce in the organization. One key component of strategic staffing strategy is deciding the appropriate balance of core (i.e., permanent employees) and flexible workers (i.e., temporary employees). This decision is not a simple one, as there are obvious advantages and disadvantages to both core and flexible workforces.
For example, the permanent workforce provides the organization with stability and predictability. Additionally, the nature of this relationship fosters cohesion between the employees and the organization. Nonetheless, a larger permanent workforce is more expensive and requires fixed, rather than variable, labor costs. Additionally, permanent workers do not provide the same amount of flexibility and adaptability that temporary workers allow.

This dissertation attempts to determine some of the conditions under which temporary employees are most useful versus when they may actually disrupt organizational performance. In the absence of such information concerning the effects of temporary workers on the attitudes of their permanent co-workers, successful staffing strategies cannot be readily developed. In the following chapter, hypotheses are proposed for when temporary employees will be most effective in facilitating organizational functioning. The results of this dissertation should enable organizations to make informed decisions about when and how the use of temporary employees will be most successful and when an alternative staffing strategy might be more appropriate.
CHAPTER 2

HYPOTHESES AND MODEL

In this chapter, I describe the model on which the current research is based, and then present the rationale for the various relationships depicted in the model. The model is intended to describe a series of inter-related factors that can exacerbate in-group biases on the part of permanent employees toward temporary employees. An underlying assumption of the model is that in-group biases will be ubiquitous among permanent employees toward temporary employees, and will be present to some degree even in the absence of the factors and events depicted in the model. Thus the model is not intended to predict the presence vs. absence of in-group biases, but rather when such biases will be substantial and disruptive and when they will likely be only a minor nuisance.

Prior to presenting the model, it is first necessary to provide a description of the in-group biases it is meant to predict—specifically, in-group favoritism and out-group homogeneity. In-group favoritism is a bias in which people show preferences for their in-group. In-group preferences can be in evaluating performance, behavior, and personality, or in providing rewards for performance (Brewer, 1979). In-groups themselves can be composed of people who share any of a variety of traits or characteristics, such as being of the same religious affiliation, the same gender, the same hometown, etc., and out-groups are people who do not share those characteristics. Consequently, people have multiple in-groups and out-groups, and the
same person can be part of either the in-group or out-group depending on the circumstances and context. For example, when Ohio State University plays the University of Michigan, most Ohio State students feel like members of the Ohio State in-group, even when these same individuals may have been competing earlier based on fraternity membership or some other category.

In addition, it is not necessary for a person to have a strong in-group affiliation for that person to exhibit an in-group bias. Even when group membership is based on seemingly trivial categories, such as individuals’ under- or over-estimation of dots presented on a screen or their supposed preferences for paintings, researchers have found in-group biases (Brewer, 1979). Under these circumstances, individuals allocate more rewards to their in-group, shelter their in-group from punishment, and interpret in-group behaviors more favorably than identical out-group behaviors (Allen & Wilder, 1975; Brewer & Campbell, 1976; Howard & Rothbart, 1980; Pettigrew, 1979). If in-group biases are prevalent when groups are based on such inconsequential factors, it seems likely that in-group biases will be quite strong with the meaningful intergroup contact that emerges when permanent workers are forced into contact with temporary employees.

In-group members typically show not only in-group enhancement, but also out-group homogeneity. Out-group homogeneity is the tendency to see out-groups as less variable than in-groups (for a review, see Ostrom & Sedikides, 1992). When out-group homogeneity occurs, an exaggeration of between-group differences and within-group similarities emerges. These effects are commonly associated with stereotyping. Out-group homogeneity effects facilitate the formation, maintenance, and application of stereotypes about out-groups because people assume that the same characteristics apply to most or all members of the out-group (Park & Hastie, 1987). Additionally, because out-groups are seen as less complex than in-groups, due to their perception as being
more homogenous, they are also perceived in a more extreme fashion than in-groups (Linville & Jones, 1980). Several factors are thought to influence the degree to which in-group members perceive out-group members as more homogenous, but one important factor is that in-group members typically have more interaction with fellow in-group members, and thus are more aware of their inherent variability (Linville, Salovey, & Fischer, 1986).

Of the variety of factors that influence different in-group biases, one of the most important factors is the threat that is associated with competition (Judd & Park, 1988; Sherif, 1966; Weber, 1994). Threat is typically defined as an indication of impending danger or harm. Because a threatening person is seen as a potential source of harm, it follows that when an individual perceives another as threatening, the modal response is to attempt to neutralize the threat by behaving in a competitive fashion toward the threatening individual (e.g., see Kelley & Stahelski, 1970; Snyder & Swann, 1978). When a threat is perceived as overwhelming, then a person might withdraw or attempt to appease, but when an opportunity is seen to neutralize the threat, people will typically respond by attempting to do so.

Threat has been shown to negatively impact leaders, negotiation tasks and performance. For example, when leaders feel threatened in their position, they are more likely to start a competition with the out-group than leaders who do not feel threatened (Bekkers, 1976). In a negotiation task, threat increased dislike of the out-group while simultaneously increasing distancing along stereotype dimensions (Grant, 1991). Finally, when people feel threatened they experience decrements in their performance (Lox, 1992). These findings suggest that when negative expectations exist for the interaction, people will respond according to how the opponent responds and in the most prudent manner as possible (Tedeschi, Malkis, Gaes, & Quigley, 1980).
In the current research, in-group biases are expected to be evident among permanent employees in their interaction with their temporary co-workers. For example, permanent employees may believe that all temporary employees work in a temporary capacity because they are not competent enough to gain a permanent job. Thus, they may treat temporary employees as if they are incompetent, thereby facilitating the failure of the temporary employee through the mechanism of self-fulfilling prophecies (see Rosenthal & Jacobsen, 1968). Additionally, permanent employees may attend only to cues that provide evidence of temporary employees' ineptitude, while ignoring cues that indicate temporary employees' competence (Bodenhausen, 1988). As stated earlier, the goal of the model underlying this research is to outline the role of variables such as perceived threat in predicting when these in-group biases will be more or less prevalent.

_Hypothesis underlying the model_

_H1:_ Permanent employees will exhibit in-group biases with regard to temporary employees. These biases will manifest themselves in a tendency to favor members of the in-group (other permanent employees), and in perceptions that members of the out-group (temporary employees) are all alike.

There are numerous ways in which a group can be defined. Most definitions of a group, however, suggest that groups are defined by the similarities inherent among the members and the perceptions of a common group fate (Wilder & Simon, 1997). Although there are likely to be similarities between permanent and temporary employees, there is likely to be little sense of common group fate among them. After all, the temporary employee will soon be leaving, while the permanent employee will be staying on. Additionally, while on the job one of the most salient features determining a sense of similarity is likely to be the nature of the employment relationship.
Consequently, both permanent and temporary employees should be aware of their group membership and the fact that they are not members of each others’ groups. This awareness, in turn, is likely to lead permanent employees to favor their own group over the out-group composed of temporary employees (Brewer, 1979).

As noted earlier, the goal of the model is to predict the relative size of in-group biases shown by permanent employees. As can be seen in Figure 1, several factors are proposed to influence the degree to which permanent employees will show in-group biases, and a variety of direct and meditational effects are expected to emerge. In order to describe the model systematically, this discussion begins with the top section of the model and proceeds to the bottom. At the end of this discussion of the relationships depicted in the model, related and subsidiary predictions are then outlined.
Figure 1: Predicting the Behavior of Permanent Employees Toward Their Temporary Co-Workers
Basic description of the model and hypotheses

H$_{2a}$: The company's reasons for hiring temporary workers will have a direct effect on how threatened permanent employees feel by the presence of temporary co-workers.

H$_{2b}$: The company's layoff policy will have a direct effect on how threatened permanent employees feel by the presence of temporary co-workers.

Hypotheses H$_{2a}$ and H$_{2b}$ derive in part from Porter's (1995) research showing that permanent employees begin to feel threatened when the organization's motives for hiring temporary employees are to cut costs, rather than to increase flexibility. This finding indicates that the level of threat the permanent employees feel is likely to be affected by the company's motives in hiring temporary employees. If the company is hiring temporary employees simply to meet fluctuations in demand, or to fill in for absent permanent employees, permanent workers' feelings of threat are likely to be minimal. If, on the other hand, permanent workers witness entire departments being replaced by temporary employees, they are unlikely to feel secure in their job, and the presence of temporary workers is likely to invoke a very real feeling of threat.

The company's policy with regard to layoffs will have a similar effect on permanent employees' feelings of threat. A no-layoff policy will make employees feel secure in their jobs, even in the presence of temporary workers. Permanent employees may pacify any fears that do arise about departmental downsizing or job redundancy by convincing themselves that even if their job were to be out-sourced, they would be reabsorbed into the company elsewhere. In the absence of a no-layoff policy, and particularly in the presence of frequent layoffs, employees will be threatened by the presence of temporary employees.
H3: The position/rank of the temporary employee compared to the permanent employee will have a direct effect on how threatened permanent employees feel by the presence of temporary co-workers.

The final variable that is expected to influence the perceived threat posed by the presence of temporary co-workers is the organizational rank of the temporary worker compared to that of the permanent employee. The higher the rank of the temporary co-worker compared to the employee, the more likely it was for the employee to feel threatened by the presence of temporary employees. When temporary employees are occupying positions that are lower than the permanent employees, however, their presence is likely to be viewed as much less threatening.

H4: To the degree that permanent employees feel threatened by the presence of temporary employees, they will be particularly likely to show in-group biases in their evaluations of temporary employees.

Recall that the model presumes that in-group biases will be ubiquitous on the part of permanent workers. As noted above, however, the literature suggests that in-group biases are exacerbated in the presence of threat. For example, Judd and Park (1988) show that when competition exists between groups, in-group favoritism and out-group derogation are enhanced, and out-group homogeneity effects are exacerbated as well. Similarly, Kahn and Ryen (1972) studied three-member teams who anticipated either cooperative or competitive interaction with another team. Team members showed in-group favoritism prior to interaction with the other team in both the competitive and cooperative conditions, but the size of this favoritism was greater when team members believed they would be competing with the other group. In addition, Wilder and
Shapiro (1989) show that the expectation of competition with an out-group generates anxiety, which causes the out-group member’s positive behavior to be discounted or ignored.

These findings can readily be extended to the threat that temporary employees pose on permanent employees’ jobs. When permanent employees are threatened by the presence of their temporary co-workers, they will be more likely to view temporary workers as all alike (e.g., incompetent), causing them to exhibit favoritism toward their fellow permanent employees. These in-group biases are likely to emerge at both the cognitive and behavioral level. At the cognitive level, permanent employees should engage in the Linguistic Intergroup Bias (see Maass, Milesi, Zabbini, & Stahlberg, 1995; Maass, Salvi, Arcuri, & Semin, 1989). Specifically, they should be more likely to make abstract inferences from positive behaviors of the in-group than of the out-group, and less likely to make abstract inferences from negative behaviors of the in-group than of the out-group. In this manner, people make no inferences from behaviors that are inconsistent with what they expect, but make and communicate inferences from behaviors that are consistent with their expectations. At the behavioral level, in-group favoritism should involve under-rewarding the out-group and over-rewarding the in-group.

**H5A:** Increased interaction between permanent and temporary employees will enable permanent employees to recognize whether temporary employees are voluntary or involuntary.

**H5B:** Limited interaction between permanent and temporary employees will make it likely that permanent employees will rely on their stereotypes of temporary employees when determining whether temporary employees are voluntary or involuntary.
Recall that those employees who feel they have no choice but to work as a temporary employee are classified as "involuntary" temporaries, whereas those who work with a temporary agency by choice are classified as "voluntary" temporaries (von Hippel et al., 1998; see also, Ellingson et al., 1998; Feldman, 1995; Feldman et al., 1995). For example, if the temporary employee is hoping to gain a permanent job by acquiring a variety of temporary employment experiences, he would be considered an involuntary temporary employee. Alternatively, if the temporary employee is not interested in a permanent position he would be considered a voluntary temporary employee. The voluntary temporary employee may work as such because of the flexibility afforded by temporary work, because he does not have time for a permanent position, or perhaps because he does not want to be tied down to one job. All of these explanation are equally viable. The point is not why he works as a temporary employee, but the fact that he chooses to do so.

The amount of interaction that the permanent worker has with a temporary co-worker will affect the beliefs that the permanent worker has about the type of temporary employee she is working with. Increased interaction with a temporary employee should lead to an increased awareness concerning whether the temporary employee is a voluntary or an involuntary temporary employee. This awareness is likely to emerge either through conversations with the temporary employee or through observation of relevant behaviors. For those workers who have limited interaction with their temporary co-workers, beliefs about the type of temporary employees with whom they are working are likely to be driven primarily by preconceived notions about why people work in a temporary capacity (i.e., stereotypes). Thus, these workers will be unable to distinguish among types of temporary employees, and rather will view all temporary employees as being alike. For example, research by Feldman (1995) suggests that the stereotype of temporary employees is that they are incompetent and their work quality is
low, which is why they are working in a temporary capacity. Furthermore, they are seen as not caring about their job, and thus likely to be here today and gone tomorrow.

**H6**: The beliefs that permanent employees have with regard to their temporary co-workers voluntary vs. involuntary status will directly impact the kind of behaviors permanent employees exhibit towards their temporary co-workers.

If permanent employees believe that a temporary employee is working in a temporary capacity by choice, and has no interest in a permanent position, they are likely to feel little motivation to help the temporary employee. Why should a permanent employee waste her time on someone who is unlikely to be around the next day and presumably has no interest in long term employment? The permanent employee may feel that voluntary temporary employees do not take their job seriously if they have no intention of finding a permanent position.

In contrast, involuntary temporary employees will be perceived as serious about their current temporary position, as they might wish to make it permanent. Thus, permanent employees will not feel that their time is being wasted to such a degree in helping involuntary temporary employees. For example, under this circumstance it may be worth the time and energy to explain a more efficient manner of completing tasks, and it may not be seen as wasted effort to try to get to know the temporary employees. Although they might be gone tomorrow, the permanent employees at least know that these temporary workers would prefer to be employed at their site on a permanent basis, and will return given the opportunity. As is noted later in the section on subsidiary predictions, the relationship between beliefs regarding temporary type and treatment toward the temporary worker might itself be moderated by threat.

**H7**: The negative behaviors that permanent employees show toward their temporary co-workers should be related to the degree of bias shown toward them.
When people are in competition with one another, and thus feel threatened, they are not only more likely to hold prejudicial beliefs, but they are more likely to act upon those beliefs. A classic study by Sherif (1965) on ten-year-old boys at summer camp illustrates this point nicely. Two groups of boys were introduced to each other through a series of competitions with one another. Although the boys did not know each other prior to these experiences, they quickly learned to dislike each other a great deal. Winners of the competition showed a deep contempt for the losers, and both sides behaved accordingly. For example, children threw rocks and sticks at campers from the other group. Other research has shown that perceptions of out-group homogeneity can have similar, albeit less dramatic effects. For example, Vanbeselaere (1991) shows that people will discriminate against apparently homogeneous out-groups when they do not discriminate against heterogeneous out-groups.

These findings can be extended to the interactions between permanent and temporary workers. Imagine a permanent employee who feels threatened by the presence of his temporary co-worker. The temporary employee sees his permanent co-worker hard at work, and in an attempt to be friendly asks him what he is working on so diligently. The permanent worker, feeling threatened, interprets this friendly comment as evidence that the temporary worker is spying on his work. Perhaps the temporary worker wants to steal his ideas and try to pass them off as his own. This sort of interpretation would cause the permanent worker to respond in a fairly negative fashion. Thus, interpreting a temporary worker’s behavior negatively can lead the permanent employee to respond negatively as well. Of course, this behavior on the part of the permanent employee would negatively impact the way in which the temporary employee would now act, causing the permanent worker to feel more confident in his
original assessment that the temporary employee is behaving competitively. In this manner, a self-fulfilling prophecy can develop into a downward spiral of behavior, interpretation, and expectation (Snyder & Swann, 1978).

**Hg:** Threat will moderate the relationship between perceptions of temporary employee type and behavior.

A final relationship that is relevant to the model, but is not depicted in the model can be seen in Figure 2. Here, it is hypothesized that threat will moderate the relationship between perceptions of why the temporary employee is working as such and the behaviors exhibited toward the temporary worker. Recall that the unmoderated hypothesis is that permanent employees will behave more positively toward involuntary temporary workers. When permanent workers are not threatened by the presence of temporary co-workers, their behavior toward the temporary employees should become more favorable as a function of the belief that the temporary employee was involuntary. In contrast, for employees who are threatened by their temporary co-workers, their behavior toward the temporary employees should become more unfavorable as a function of the belief that the temporary employee was involuntary. Such a finding would reveal that perceptions of why people choose to work in a temporary capacity do not have a simple relationship with the behaviors that are exhibited toward their temporary co-workers. Rather, this relationship is moderated by how threatening the employee finds their temporary co-workers to be.
Figure 2: Threat as a Moderator Between Perceptions and Behavior

Subsidiary predictions

As was discussed in the previous chapter, the limited research that exists on the effects that temporary workers have on their permanent co-workers' attitudes has converged to suggest that temporary workers have largely negative effects on permanent employees. This negative effect is unlikely to be uniform and under all circumstances, however. Rather, there are likely to be a number of variables that moderate this effect. One of the goals of these subsidiary predictions is to examine factors that might exacerbate this perceived negative effect of temporary workers on permanent employees and those that might attenuate it. In this section, a series of moderated predictions are laid out that describe the effects of temporary workers on permanent workers' job satisfaction, commitment, intention to turnover, organizational citizenship behaviors (OCBs) and supervisor-rated performance. A brief description of these dependent variables is followed by the hypotheses that explain the various moderated relationships that are expected.
Job satisfaction refers to "a pleasurable feeling that results from the perception that one's job fulfills or allows for the fulfillment of one's important job values" (p. 901; Locke, 1976). Numerous studies have been conducted over the years to determine various antecedents and consequences of satisfaction (Rice, Gentile, & McFarlin, 1991). The factors that effect job satisfaction fall into two broad categories: organizational characteristics and employee characteristics. Organizational characteristics refer to various aspects of the job, such as organizational policies and procedures and working conditions. For example, employees tend to be more satisfied with their jobs when they feel they have ample opportunity to communicate with their supervisor (Callan, 1993). Employee characteristics refers to aspects of the individual, such as the personality of the employee or the employee's status and seniority within the organization. For example, positive relationships have been shown between job satisfaction and self-esteem (Locke, 1976), and job satisfaction and the ability to withstand stress (Scheier, Weintraub, & Carver, 1986). Additionally, there also seem to be stable tendencies for employees to be satisfied or dissatisfied, suggesting that changes in objective characteristics will not always result in increases or decreases in reported levels of job satisfaction (Arvey, Bouchard, Segal, & Abraham, 1989).

Various studies have examined the consequences of job satisfaction. Although it can effect organizational functioning, the effects are not as strong as one might expect. For example, Judge (1993) showed that although job satisfaction predicts voluntary turnover, this relationship is more robust for individuals who have more positive dispositions. Relationships have also been shown between satisfaction and organizational citizenship behaviors (Moorman, 1993). The measurement of job satisfaction is discussed in the method section.

Commitment refers to individuals' identification with the organization and their willingness to work hard on the organization's behalf (for a review see Hulin, 1991).
Implicit in this definition is the idea that employees who are committed will remain at the organization for a long time. More recently, the commitment literature has begun to examine three different bases of commitment (Allen & Meyer, 1990). A description of these three forms of commitment, as well as the measurement of them are discussed in the method section.

*Intention to turnover* refers to "an individual's desire to [not] continue to be an organization member" (Cammann, Fichman, Jenkins, & Klesh, 1983, p.80). Previous research has shown that the intention to turnover is better than other job attitudes in predicting voluntary turnover (Kraut, 1975). A variety of models of turnover have been described in the literature (e.g., Lee & Mitchell, 1994; Mobley, Horner, & Hollingsworth, 1978). The two most widely studied constructs with regard to voluntary turnover are satisfaction and alternatives (Hulin, Roznowski, & Hachiya, 1985). Research has shown a modest relationship between satisfaction and turnover such that individuals who are more dissatisfied with their jobs are more likely to turnover (Tett & Meyer, 1993). The current economic conditions are a stronger predictor of whether the voluntary turnover / satisfaction relationship will emerge, however. When unemployment rates are low, the relationship between turnover and satisfaction is more robust than when unemployment rates are high (Carsten & Spector, 1987).

*OCB’s* have been described as discretionary contributions by employees beyond that which is required for the job (for a review see Organ, 1990). These behaviors are thought to be beneficial to the organization but at the same time are not enforceable by formal role obligations (Batemen & Organ, 1983). Examples of such behaviors include training new employees, care for organizational property, or a standard of attendance beyond which is enforceable. These behaviors presume enactment of some positive behavior, but equally important, involve forbearance of negative behaviors. For
example, refraining from complaining about trivial matters or starting fights with others. These on the job behaviors are thought to be more readily malleable than performance on the job because performance can be affected by many variables outside of the employee’s control. Thus, a relationship between attitudes and performance may not emerge, while a relationship between attitudes and OCBs is more likely.

H9: The attitudes and performance of permanent workers who have temporary co-workers will be less favorable when there is a continual flow of new temporary employees entering the organization.

H10: The attitudes and performance of permanent workers who have temporary co-workers will be less favorable when the permanent employees feel they are expending too much energy to train the temporary employee.

Permanent workers who have temporary co-workers will not necessarily report lower satisfaction, commitment, intention to turnover or show fewer OCBs and lower performance. This relationship should emerge under two related circumstances however. First, when there is continuous turnover of temporary employees in the organization, a negative influence of temporary workers on permanent employee’s attitudes and performance should emerge. In this situation, the constant flux of temporary workers requires increased workload for the permanent employee as new temporary workers must be continually trained. Additionally, a constant flux of temporary workers within an organization makes it less likely that the temporary worker is alleviating any work stress for the permanent employee. Rather, the temporary worker would be contributing to the “over-worked” feeling of many permanent employees. The opposite pattern should emerge, however, when the temporary worker remains at the organization for longer than it takes to learn the job. It is under these circumstances that the temporary employee can alleviate stress for over-
worked permanent employees. Thus, as the tenure of temporary employees increases, job attitudes and performance of permanent employees should become more positive.

A related circumstance under which temporary workers will negatively influence the attitudes and performance of permanent workers is when the burden of training the temporary worker is placed upon the shoulder of the permanent worker. Constantly “training” temporary workers should only add to the permanent employee’s job duties, making it more difficult for the permanent worker to get his or her job done. Again, under these circumstances the stress that the temporary workers add to the permanent workers’ job will undermine any positive benefits that might be accrued from temporary employee usage. In contrast, when minimal effort is required on the part of the permanent employee to teach the temporary worker his or her job, the presence of temporary workers should positively affect job attitudes and performance.
CHAPTER 3

METHOD

Procedure

A number of strategies were adopted to find organizational participants. First, permission was granted to attend a Human Resource Association of Central Ohio (HRACO) meeting. The attendees at the meeting were approached during registration and asked to participate in the study by bringing a small packet of surveys back to their organization. It was explained further that each packet contained three smaller packets, each of which was intended for three supervisors at their organization. In each of these packets was three surveys—one for a supervisor, one for a permanent employee, and one for a temporary employee (when applicable). Each of the surveys had a return address, postage-paid envelope attached to it, and each envelope was numbered so that the three surveys that made up a packet could be associated together. As a consequence, all that would be required of the participants was to fill out the survey. This same strategy for garnering participation was adopted with three evening program Masters classes in the Fisher College of Business at The Ohio State University, and at a board meeting of manufacturing executives. Finally, it became necessary to send packets directly to individuals in a variety of organizations to increase the sample size to acceptable levels for data analysis. In all cases, the purpose of the project was explained and a promise was made that the results would be provided to any of the managers or HR professionals who might be interested. The interested party simply

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had to write his or her address on the provided paper and mail it in the provided postage-paid, return address envelope. By disassociating the name and address from the completed surveys in this way, I could maintain anonymity of the respondents.

Participants

Employees who have temporary co-workers were the primary participants in this study. Surveys were also distributed to the supervisors of these employees, as well as to one of the employee's temporary co-workers. All survey participants were told that their responses were completely confidential and that no one in the organization would have access to completed surveys. By mailing the survey directly back to Ohio State the participant could be reassured of complete anonymity, particularly since no record was kept of which organization received which packet, or of which employee was asked to complete a survey.

Measures

There were a variety of measures taken to test the predicted model and subsidiary predictions. The measures are described in the order in which they appear in the model. Each subsection below represents the description of the measures that underlie a single construct within the model. In most cases, multiple measures of each construct were sought to enhance reliability and validity. Items that are followed by an "(R)" were reverse scored when creating the various scales.

Company motives with regard to hiring temporary employees: Two types of measures were used to assess the company's motives with regard to hiring temporary employees. First, the employees were asked a series of questions to assess their beliefs about the company's hiring motives. This measure was necessary because often it does
not matter what the actual company motives are, but rather what the employee believes
the company's motives are (cf. Snyder & Swann, 1978). To corroborate these
responses, the supervisor was also asked what the primary motives are for hiring
temporary workers.

Employee Questions:

1. I believe that the company is hiring temporary workers to save money. (R)

   1  2  3  4  5   6   7
   disagree disagree disagree neutral agree agree agree
   strongly slightly slightly strongly strongly

2. I believe the company is hiring temporary workers because of the added flexibility
   they provide the organization.

   1  2  3  4  5   6   7
   disagree disagree disagree neutral agree agree agree
   strongly slightly slightly strongly strongly

3. I believe the company is hiring temporary workers so that permanent employees' jobs will be less stressful.

   1  2  3  4  5   6   7
   disagree disagree disagree neutral agree agree agree
   strongly slightly slightly strongly strongly

4. I believe the company is hiring temporary workers to help the permanent workers.

   1  2  3  4  5   6   7
   disagree disagree disagree neutral agree agree agree
   strongly slightly slightly strongly strongly

Supervisor Question:

1. What would you say is the primary motivation for temporary employee use at your organization (please choose only one)?

   ___ To decrease costs (e.g., per hourly fees, selection & recruitment costs)
   ___ To increase flexibility (e.g., effectively deal with fluctuations in demand)
   ___ To avoid certain consequences (e.g., perceptions of wage inequity)
   ___ Other (describe) ____________________________________________
Company policy with regard to layoffs: Two types of measures were used to assess the company's policy with regard to layoffs. First, the employees were asked a series of questions in order to assess their beliefs regarding the company's layoff policy. This measure was necessary because often it does not matter what the actual company policy is, but rather what the employee believes the company policy is (cf. Snyder & Swann, 1978). Second, supervisors were asked about the company's policy with regard to layoffs to help corroborate the response from the employee.

Employee Questions:

1. I feel a sense of employment security with this organization.

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2. I think the organization would lay people off if that would improve profits. (R)

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3. The organization would only lay people off if it were absolutely necessary.

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Supervisor Question:

1. Which of the following descriptions most closely describes your organization's layoff policy?

   __ The organization would not lay people off except as a last resort
   __ The organization strives to make minimal layoffs
   __ When times are tight, employees are laid off
   __ Employees are regularly laid off
   __ Other (describe) _____________________________________________

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Rank of the Temporary Employee: Permanent employees were asked what the average organizational ranking of their temporary co-workers tended to be.

1. On average, is the position your temporary co-workers work in:
   
   ___ Lower than yours
   ___ Equal to yours
   ___ Higher than yours

Threat: How threatened permanent employees feel by the presence of temporary employees was assessed solely through the following self-report items.

1. My position could NOT be replaced by a temporary employee. (R)

   1 disagree strongly  2 disagree slightly  3 neutral  4 agree slightly  5 agree  6 agree strongly

2. I worry that I will be replaced by a temporary employee.

   1 disagree strongly  2 disagree slightly  3 neutral  4 agree slightly  5 agree  6 agree strongly

3. I worry about my job security because of the use of temporary employees.

   1 disagree strongly  2 disagree slightly  3 neutral  4 agree slightly  5 agree  6 agree strongly

4. I feel threatened by temporary employees.

   1 disagree strongly  2 disagree slightly  3 neutral  4 agree slightly  5 agree  6 agree strongly

Biases towards temporary employees: Both in-group favoritism and out-group homogeneity were assessed. An implicit measure of in-group bias was assessed via the Linguistic Intergroup Bias (LIB; Maass et al., 1989; 1995). The LIB refers to the tendency to describe behavior abstractly when referring to stereotype-congruent behaviors but concretely when referring to stereotype-incongruent behaviors. For
example, if an Asian-American woman were seen striking someone, people would describe the event in terms of concrete behaviors ("Lin-Chiat hit someone"), whereas if an African-American were engaging in this same behavior, people would describe the event in abstract trait terms ("Tyrone is violent"). Because people may be unwilling to admit that they favor their in-group (in this case, permanent employees), the LIB will be used to circumvent the "unwillingness" problem associated with self-report (see Franco & Maass, 1996).

Four scenarios were used to assess the LIB. Two scenarios presented a temporary employee as the target, and two scenarios presented a permanent employee as the target. These scenarios differed in whether the target performed well or poorly. These scenarios were also counterbalanced to equate for stimulus effects. For example, below is a scenario in which a temporary employee is portrayed in a positive fashion.

Garrett Hunter, a temporary employee who is working in our credit department, is being commended for his outstanding performance. Garrett began working with us two months ago through a contract with one of our temporary vendors. Since that time, Garrett has successfully collected 72% of the cases that he has been given. Additionally, he has arranged a partial payment plan with another 14% of the cases. Not only has Garrett successfully collected many overdue credit card bills from customers, but he has done so with top-notch customer service.

Four descriptive statements followed each scenario and were developed according to Semin and Fiedler's (1988) Linguistic Category Model. These four statement ranged from least to most abstract, such that the first statement referred to objective descriptions of observable behaviors that have a clear beginning and end, and the last statement described highly abstract personal dispositions. For example, the following four statements followed the scenario about Garrett, the temporary employee, and people were asked to indicate how well the statements described the paragraph.
1. Garrett has collected a great deal of money.

1 2 3 4 5 6 7 8 9 10
describes very poorly

2. Garrett made money for the organization.

1 2 3 4 5 6 7 8 9 10
describes very poorly

3. Garrett has good bill-collecting skills.

1 2 3 4 5 6 7 8 9 10
describes very poorly

4. Garrett is a good employee.

1 2 3 4 5 6 7 8 9 10
describes very poorly

The LIB is expected to emerge with regard to temporary employees, such that
permanent employees will be more willing to abstract from a scenario in which a
temporary employee makes a mistake than from a scenario in which a temporary
employee performs well. Thus, from the example above, permanent employees should
be relatively unwilling to endorse the most abstract description, “Garrett is a good
employee.” The opposite pattern should emerge when the permanent employees are
evaluating the behaviors of other permanent employees. Here, they should be relatively
unwilling to abstract from the scenario in which the permanent employee makes a
mistake, but should abstract from the scenario in which the permanent employee is
portrayed in a positive light.
The directions provided for completion of the LIB task were as follows:

The following events were described in various company staffing reports around the country. Each description is followed by four statements summarizing it. Please read each statement and indicate the degree to which each statement describes the accompanying story.

In addition to the implicit measure, an explicit measure of in-group bias based on Tajfel's (1970; Tajfel, Billig, Bundy, & Flament, 1971) allocation matrices was also used. The allocation matrix is a common way to assess the behavioral manifestation of in-group favoritism (Billig & Tajfel, 1973; Tajfel et al., 1971). The general paradigm involves giving participants the opportunity to allocate money to two other people—an out-group member and an in-group member. The identity of the two people is indicated by labels specifying group membership. The choice matrices that were used in this study pit the in-group members against the out-group. That is, favoring one group necessarily means disadvantaging the other. These choice matrices had the employee choosing how gains should be distributed. In similar work, Tajfel and his colleagues have found that the choice strategies that are preferred by people are the ones that favor their in-group (Tajfel, 1970; Tajfel et al., 1971). The two choice matrices differed slightly in that one matrix contained a mid-point which allowed for an equal distribution of the bonus while the other forced respondents to favor one group over the other. Because the forced-choice matrix requires respondents to show bias in one direction it is possible that this matrix will show more bias than the non-forced choice matrix. The following is an example of the forced-choice matrix:
Due to the high degree of accuracy among tellers in local banks, a bonus of $15,000 is being distributed among them. A decision of how to allocate these funds needs to be made, as they will not necessarily be divided equally among temporary and permanent employees. Please circle the letter indicating the breakdown of this bonus that you feel is most appropriate.

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The directions provided for the completion of the allocation matrices were as follows:

We are interested in what employees feel are fair and equitable bonuses under a variety of circumstances. Because money is limited, bonuses cannot always be allocated equally, and sometimes not all of those who are deserving will get bonuses. Thus, under some circumstances you may feel that money should be shared equally, but other times equity or opportunity might suggest that money be given out disproportionately to different members of the organization. There is no correct answer, your opinion is all that we are interested in. Please circle the option you feel is most appropriate for each of the following circumstances.

An out-group homogeneity measure was adapted from Judd and Park (1988). Participants were given a series of seven boxes and asked to place appropriate weights in each box to indicate how often temporary and permanent employees behave a certain way. For example, when assessing how diligently someone works, the box at one end was labeled “works unreliably”, while the box at the opposing end was labeled “works very diligently”. The middle box was labeled “works reasonably”. A weight of 10 in any one box would imply that that particular level of effort is applicable much of the time, while a weight of 0 would imply that that level of effort is hardly ever seen. The instructions to participants explained that weights placed in the seven boxes do not have
to sum to any number, and should simply reflect what they have seen or believe to be true. If a permanent employee perceives all temporary employees to be alike, one would expect high numbers to be clustered in one or two boxes. Conversely, if the permanent employee perceives great variability among temporary employees, the weights will be dispersed across more boxes. In essence, the distribution of weights represents how homogenous or heterogeneous the respondents perceive temporary and permanent employees to be. Homogeneity was calculated using the following modified standard deviation formula, which represents the amount of variability present in the ratings:

$$S.D. = \text{square root } \{ \sum [(X_o - X_m)^2 \times \text{frequency}(X_o)] / n - 1 \}$$

where $X_o = \text{particular level of the behavior (i.e., ranging from 1 to 7 as a function of the position of the box being rated)}$

$X_m = \text{weighted mean of the levels of behavior} = \{ \sum [X_o \times \text{frequency}(X_o)] \} / \sum \text{frequency}(X_o)$

$n = \sum \text{frequency}(X_o)$

The following labels were used for participants to evaluate both temporary and permanent employees.
The directions given to employees to complete the outgroup homogeneity measure for temporary employees were as follows (these directions were then repeated for evaluation of the permanent employees):

Please indicate how often you see temporary employees behaving in each of the different ways listed below. In each box place a number from 0 to 10 to represent how often you see that particular behavior. A number of 0 means that you never witness that behavior, whereas a number of 10 means you very frequently witness that behavior. The numbers in each row do not need to sum to any particular value and should simply reflect what you see or believe to be true.

For example, if you believe that almost all temporary employees “work reasonably” you would indicate this belief by having high numbers in the boxes above the label “works reasonably.” You would then put very low numbers (or zeros) in the boxes that correspond to working diligently and working unreliably. Alternatively, if you see temporary employees who work diligently, reasonably, and unreliably you would have higher numbers scattered throughout the boxes. Remember, you should place a number from 0 to 10 in every box.
Interaction with the temporary employee: Two types of measures were used to assess the level of interaction that permanent employees have with their temporary coworkers. First, permanent employees were asked several questions about the level of interaction they have with other employees on their job, including how much interaction they have with other temporary employees. Second, supervisors of permanent employees were asked to judge how much interaction their permanent employees have with temporary employees. The questions for these two sections follow:

Employee Questions:

1. How much do you communicate with temporary employees in order to complete your job?

   1. never  2. once to twice per month  3. once to twice per week  4. once to twice per day  5. regularly throughout the day

2. How much interaction do you have with temporary employees while you are working?

   1. none  2. very little  3. little  4. moderate  5. much  6. very much

3. How much do you rely on temporary employees to get your job done?

   1. none  2. very little  3. little  4. moderate  5. much  6. very much

4. How much do you coordinate your activities with temporary employees in order to complete your job?

   1. none  2. very little  3. little  4. moderate  5. much  6. very much
Supervisor Questions:

1. To what extent do you agree/disagree with the statement: "Joint or cooperative effort is needed between the temporary and permanent employees in my unit to accomplish their work."

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2. To what extent do you agree/disagree with the statement: "Joint or cooperative effort is needed between the temporary and permanent employee who I have asked to complete this survey to accomplish their work."

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**Beliefs regarding temporary employee type:** Employees' beliefs regarding the type of temporary employees they are working with was more difficult to assess, as different employees work with different numbers and types of temporary employees, and some employees do not have temporary co-workers. Therefore, the questions below were designed first to assess whether employees have temporary co-workers, and second to assess what percentage of their temporary coworkers they perceive to be voluntarily and involuntarily working in a temporary capacity.

1. Does your organization use temporary employees?
   
   ____ Yes
   ____ No  (if no, skip to Part 5)

2. Does your area/division/unit use temporary employees?
   
   ____ Yes
   ____ No

7. In your opinion, what percentage of your temporary co-workers prefer to work in a temporary capacity because they value certain aspects of temporary work (for example, the flexibility of working when they want)?

__________  %
8. In your opinion, what percentage of your temporary co-workers are hoping to gain a permanent job through a temporary position.

_________ %

**Behaviors towards temporary employees:** The behaviors that permanent employees exhibit toward temporary employees were assessed through self-report and by surveying the temporary co-workers of permanent employees who filled out the survey.

The following questions were used in the self-report measure of permanent employees’ behaviors towards permanent and temporary workers. These questions were designed to assess both behaviors that the respondents have exhibited as well as behaviors they say they would exhibit. Questions four to seven were adapted from the Organizational Citizenship Behavior (OCB) questionnaire that was discussed in the previous chapter. Citizenship behaviors are typically acquired from the supervisors. Recent research, however, has relied upon the work group members themselves to assess OCBs, rather than the supervisor (Podaskoff, Ahearne, MacKenzie, 1997). As will be seen later, the supervisor was also asked to rate the permanent and temporary workers on a number of OCB questionnaire items.

1. When a new permanent employee starts to work in my area/division, I am likely to help him or her “learn the ropes.”

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2. When a new temporary employee starts to work in my area/division, I am likely to help him or her “learn the ropes.”

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3. If a temporary employee asks me for help, I am likely to help him or her.

1 disagree 2 disagree 3 slightly neutral 4 agree slightly 5 agree 6 agree strongly 7

4. I help my temporary co-workers if they fall behind in their work.

1 disagree 2 disagree 3 slightly neutral 4 agree slightly 5 agree 6 agree strongly 7

5. I willingly share my expertise with my *permanent* co-workers.

1 disagree 2 disagree 3 slightly neutral 4 agree slightly 5 agree 6 agree strongly 7

6. I willingly share my expertise with my *temporary* co-workers.

1 disagree 2 disagree 3 slightly neutral 4 agree slightly 5 agree 6 agree strongly 7

7. I willingly give my time to help my temporary co-workers who have work related problems.

1 disagree 2 disagree 3 slightly neutral 4 agree slightly 5 agree 6 agree strongly 7

Because the behaviors that permanent employees exhibit towards their temporary co-workers are the primary dependent variable in this study, it follows that multiple assessments should be obtained. This approach increases the possibility that one can circumvent the problems associated with common method variance and issues of social desirability. Thus, the temporary co-workers of permanent employees who completed the survey were also asked about the kinds of behaviors that permanent employees exhibit towards them.
1. The permanent employees I work with have been willing to help me out when I've needed it.

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2. The permanent employees with whom I work treat me as if I don’t exist. (R)

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3. The permanent employees have made no effort to get to know me. (R)

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4. The permanent employees have made an effort to make me feel like part of the group.

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5. The permanent employees have gone out of their way to make me feel appreciated.

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6. I enjoy working with the permanent employees at this organization.

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The following three questions were adapted from the Organizational Citizenship Behavior questionnaire. By assessing the OCBs of temporary workers, a more complete understanding of the dynamics between permanent and temporary workers might be assessed.

1. I help my co-workers if they fall behind in their work.

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2. I willingly share my expertise with my co-workers.

1 disagree strongly 2 disagree slightly 3 neutral 4 agree slightly 5 agree 6 agree strongly

3. I willingly give my time to help my co-workers who have work related problems.

1 disagree strongly 2 disagree slightly 3 neutral 4 agree slightly 5 agree 6 agree strongly

**Job Satisfaction:** Job satisfaction of permanent and temporary workers was assessed. The General Satisfaction Scale from the Job Diagnostic Survey (JDS; Hackman & Oldham, 1975) was used because of its relatively short length and its well tested reliability and validity. In fact, a meta-analysis conducted by Wanous and his colleagues (Wanous, Reichers, & Hudy, 1997) compared the merits of single-item and multi-item satisfaction scales. Their analysis revealed that well-constructed scales are preferable to single items, although single items are often times appropriate. Of the multi-item scales examined, the JDS was recommended for situations where survey space is limited, but not limited to a single-item measure. The following questions, intended for permanent workers, came directly from the JDS.

1. Generally speaking, I am very satisfied with this job.

1 disagree strongly 2 disagree slightly 3 neutral 4 agree slightly 5 agree 6 agree strongly

2. I frequently think of quitting this job. (R)

1 disagree strongly 2 disagree slightly 3 neutral 4 agree slightly 5 agree 6 agree strongly

3. I am generally satisfied with the kind of work I do in this job.

1 disagree strongly 2 disagree slightly 3 neutral 4 agree slightly 5 agree 6 agree strongly
4. Most people on this job are very satisfied with the job.

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5. People on this job often think of quitting. (R)

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The wording of the JDS items for the temporary workers differed somewhat in order to represent the different connection that temporary workers have with the organization. Given the movement of temporary workers through various organizations it makes less sense to ask their feelings about a particular assignment. Therefore, the following questions were reframed to focus on satisfaction with temporary work in general, as opposed to the particular assignment the worker is currently involved with.

1. Generally speaking, I am very satisfied with being a temporary employee.

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2. I frequently think of quitting temporary employment. (R)

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3. I am generally satisfied with the kind of work I do as a temporary employee.

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4. Most people who work as temporary employees are very satisfied with the job.

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</table>
5. People who work as temporary employees often think of quitting. (R)

- disagree
- disagree
- neutral
- agree
- agree
- agree

Commitment: Allen and Meyer’s (1990) three-component model of commitment integrates the various conceptualizations of commitment. This model has received a great deal of attention in the literature and seemed the most appropriate for the purposes of this study. The first component, affective commitment (questions one to three below), refers to the employees’ “emotional attachment to, identification with, and involvement in the organization” (p. 1). Employees who are affectively committed to the organization are committed to the organization and what it stands for. In contrast, continuance commitment (questions four and five below) refers to the costs the employee associates with leaving the organization. For example, employees may be loathe to leave an organization before their retirement funds are vested or stock options become available. Additionally, a lack of perceived alternatives outside of the current organization also contributes to continuance commitment. Normative commitment was not assessed in this study due to its similarities with affective commitment (Allen & Meyer, 1990). Normative commitment refers to the pressure the employee feels to remain at the organization because he or she believes it is the right thing to do. The questions below that were chosen for inclusion from the affective and continuance commitment scales showed the highest factor loadings in Allen and Meyer’s (1990) research on scale development.

1. I do not feel “emotionally attached” to this organization. (R)

- disagree
- disagree
- neutral
- agree
- agree
- agree

60
2. This organization has a great deal of personal meaning for me.

1  2  3  4  5  6  7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly strongly strongly

3. I do not feel a strong sense of belonging to my organization. (R)

1  2  3  4  5  6  7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly strongly strongly

4. I feel that I have too few options to consider leaving this organization.

1  2  3  4  5  6  7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly strongly strongly

5. It would be very hard for me to leave my organization right now, even if I wanted to.

1  2  3  4  5  6  7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly strongly strongly

Again, the question wording was changed somewhat for the temporary employee population. The goal of these questions was not only to assess commitment to the organization (which probably changes frequently), but rather, to assess the commitment to temporary employment as a career.

1. I do not feel “emotionally attached” to the organization where I am working today. (R)

1  2  3  4  5  6  7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly strongly strongly

2. The organization I am working at today has a great deal of personal meaning for me.

1  2  3  4  5  6  7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly strongly strongly
3. I do not feel a strong sense of belonging to the organization where I am working today. (R)

1 disagree strongly 2 disagree 3 disagree slightly 4 neutral 5 agree slightly 6 agree 7 agree strongly

4. I feel that I have too few options to consider leaving temporary employment.

1 disagree strongly 2 disagree 3 disagree slightly 4 neutral 5 agree slightly 6 agree 7 agree strongly

5. It would be very hard for me to quit temporary employment right now, even if I wanted to.

1 disagree strongly 2 disagree 3 disagree slightly 4 neutral 5 agree slightly 6 agree 7 agree strongly

**Intent to Turnover**: Three items from the *Handbook of Organizational Measurement* (Price & Mueller, 1986) were used to assess intent to turnover. In previous research these three items have been found to cohere well.

1. I will probably look for a new job in the next year.

1 disagree strongly 2 disagree 3 disagree slightly 4 neutral 5 agree slightly 6 agree 7 agree strongly

2. I often think about quitting.

1 disagree strongly 2 disagree 3 disagree slightly 4 neutral 5 agree slightly 6 agree 7 agree strongly

3. How likely is it that you could find a job with another employer with about the same pay and benefits that you have now?

1 not at all likely 2 somewhat likely 3 quite likely 4 extremely likely

**Performance of Temporary and Permanent Employees**: In order to assess whether temporary workers systematically influence the performance of permanent workers, performance measures were taken. Supervisors were asked to answer a series of
questions with regard to the permanent worker who was asked to complete the survey as well as the temporary worker (when appropriate). A global measure of performance was obtained first (question 1), followed by four specific dimensions of performance (question 2). Questions 3 through 8 come directly from the OCB questionnaire (Podaskoff & MacKenzie, 1994). As mentioned earlier, permanent and temporary workers also answered questions about their own reported OCBs. Supervisors were asked first to rate the permanent employee on OCB’s, and then the questions repeated in the same order, but the directions instructed the supervisor to respond with regard to the temporary worker who was asked to complete the survey. Finally, because the supervisor may not have had much contact with the temporary worker, the last question asked the supervisor how confident he was with the answers provided for the temporary worker. This question appears as question nine below, and appeared after the supervisor finished rating the temporary worker’s performance.

1. I would describe this person’s overall level of performance as:

   ___ substantially lower than what I expect for someone in that job
   ___ lower than what I expect for someone in that job
   ___ slightly lower than what I expect for someone in that job
   ___ about what I expect for someone in that job
   ___ slightly higher than what I expect for someone in that job
   ___ higher than what I expect for someone in that job
   ___ substantially higher than what I expect for someone in that job

2. Please rate the performance of this employee on each of the following dimensions:

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### Cooperation

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3. This employee helps other co-workers if they fall behind in their work.

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4. This employee willingly shares his/her expertise with his/her co-workers.

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5. This employee takes steps to try to prevent problems with other co-workers.

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6. This employee willingly gives of his/her time to help other co-workers who have work related problems.

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7. This employee “touches base” with other co-workers before initiating actions that might affect them.

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8. This employee is encouraging when others are down.

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9. How much confidence do you have in your answers with regard to the temporary employee? For example, if the temporary worker has been under your supervision for a short time, you may not feel very confident in your answers. Alternatively, if you have had ample opportunity to witness this temporary employee’s performance you would probably feel very confident in your answers.

1 2 3 4 5
not at all confident somewhat confident very confident

Effect of Presence of Temporary Workers on Permanent Workers: To assess whether permanent workers found the presence of temporary workers disruptive, they were asked three questions about how temporary workers affect their workload.

1. The presence of temporary workers has not diminished my work load.

1 2 3 4 5 6 7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly slightly slightly strongly

2. I feel I spend a lot of time bringing temporary workers “up to speed.”

1 2 3 4 5 6 7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly slightly slightly strongly

3. I get frustrated with the number of temporary employees who are coming and going.

1 2 3 4 5 6 7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly slightly slightly strongly

Voluntary or Involuntary Temporary Employee: To follow up previous work by von Hippel et al. (in press), temporary workers were asked a series of questions to assess whether they are working in a temporary capacity by choice or involuntarily. Questions were also asked to assess what factors of temporary work they find most attractive.

1. I would prefer permanent work over temporary work if it were available.

1 2 3 4 5 6 7
disagree disagree disagree neutral agree agree agree
strongly slightly slightly slightly slightly slightly strongly
2. I would rather be a permanent employee.

1 disagree disagree disagree neutral agree agree agree strongly
2 slightly slightly slightly slightly strongly

3. I work as a temporary employee because of the flexibility that temporary work provides (for example, being able to pick and choose assignments).

1 disagree disagree disagree neutral agree agree agree strongly
2 slightly slightly slightly slightly strongly

4. I work as a temporary employee because of the variety that temporary work provides (for example, performing a number of different tasks).

1 disagree disagree disagree neutral agree agree agree strongly
2 slightly slightly slightly slightly strongly

5. I am working as a temporary employee in hopes of finding a permanent position.

1 disagree disagree disagree neutral agree agree agree strongly
2 slightly slightly slightly slightly strongly

6. I am gaining skills as a temporary employee that will help me find a permanent position.

1 disagree disagree disagree neutral agree agree agree strongly
2 slightly slightly slightly slightly strongly

7. If the organization that I'm working at today offered me a permanent job I would accept it.

1 disagree disagree disagree neutral agree agree agree strongly
2 slightly slightly slightly slightly strongly

8. I think I have a good chance of getting a permanent job through a temporary assignment.

1 disagree disagree disagree neutral agree agree agree strongly
2 slightly slightly slightly slightly strongly

Demographic and Organizational Context Variables: The demographic characteristics of the participants as well as characteristics of the organization were assessed to explore their relationship with the variables in the model. The questions for
supervisors concerned the number of temporary employees at their organization, size of their organization, industry of the organization, and whether the organization uses any group performance based pay. These questions follow.

1. Does your organization use temporary employees?
   ___ Yes
   ___ No (if no, please skip to question 4)

2. On a typical day, how many temporary employees work in your organization?
   

3. On a typical day, how many temporary employees work in your unit/area?
   

4. How many full-time, permanent employees does your organization employ?
   

5. Which of the following best describes the industry of your organization?
   ___ Agriculture, Forestry & Fishing
   ___ Mining
   ___ Construction
   ___ Manufacturing--Durable Goods
   ___ Manufacturing--Nondurable goods
   ___ Transportation and Utilities
   ___ Wholesale and Retail Trade
   ___ Finance, Insurance, Real Estate
   ___ Services
   ___ State and Local Government

6. Is any of the compensation (including bonuses) in your unit based on group performance?
   ___ Yes
   ___ No
Permanent workers were asked their tenure with the organization, as well as their age and gender.

1. How old are you? ______________

2. Are you male or female? ______________

3. How long have you been employed at your current organization? ______________

Temporary workers were asked their gender and age, as well as their tenure as a temporary employee and their tenure with the current organization.

1. How old are you? ______________

2. Are you male or female? ______________

3. How long have you worked as a temporary employee? ______________

4. How long have you been employed at the organization where you are currently placed?

______________

Analyses

Whether permanent employees show in-group favoritism and out-group homogeneity ($H_1$) was tested using ANOVA. The details of the analyses for each of the biases examined are provided in the results section. The model ($H_2$ through $H_n$) was tested using regression based causal modeling as outlined by Baron and Kenny (1986). As such, the predictor variables were simultaneously regressed on the dependent variables. For example, when trying to predict the behaviors that permanent employees exhibit toward their temporary co-workers, the LiB, allocation matrices, and
the perceptions of the permanent worker as to why the temporary employee is working in that capacity were regressed on the behavior that the permanent worker exhibits toward their temporary co-workers. Moderated regression, as outlined by Aiken and West (1991), was used to test whether threat moderates the relationship between perceptions of temporary employee type and the behaviors exhibited toward the temporary workers (H₃). The details of this analysis are provided in the results section. Finally, the subsidiary predictions regarding the differences between permanent employees attitudes based on whether new temporary workers are constantly entering the organization (H₄) and the amount of effort required to “train” the temporary employee (H₁₀) were tested using regression.
CHAPTER 4

RESULTS

Sample Description

Permanent employees: A total of 99 permanent employees completed the questionnaire. There were 49 males and 46 females, and 4 unknown. The mean age was 37.08 with the youngest employee being 21 and the oldest being 69. The average amount of time that employees worked at their current organization was 7 years and 7 months. Eighty-one employees worked in organizations with temporary employees while 18 did not. Seventy-five of the 81 employees who did have temporary employees in their organization also had temporary employees in their area while 6 did not.

Permanent employees were somewhat satisfied with ($M = 4.97$) and committed to ($M = 4.76$) their current employment situation. The mean level of continuance commitment ($M = 3.68$) was lower, indicating that employees felt that they have a choice whether to remain at their current place of employment. Finally, employees were unlikely to indicate the desire to find a new job ($M = 3.02$), although employees felt that they could find a new job with the same level of pay and benefits that they are currently earning ($M = 4.38$). Means and standard deviations for the remaining survey items can be found in the appendix.

Temporary employees: A total of 62 temporary employees completed the questionnaire. There were 33 males and 29 females. The mean age was 35.85 with the
youngest employee being 17 and the oldest being 64. The average amount of time that employees worked at their current organization was 12.67 months and the average amount of time that the employees had worked in a temporary capacity was 22.16 months. The vast majority of temporary employees seemed to be working involuntarily, as they indicated a strong desire to find a permanent position through their temporary work (M = 5.83). The average level of job satisfaction for temporary employees was 4.32. Their affective commitment levels were higher (M = 4.44) than would be expected given their satisfaction levels, perhaps because they were hoping that their current position would turn into a permanent one. At the same time, their continuance commitment average (M = 3.75) suggested that they feel they have some choice in deciding to work in a temporary capacity. In general, temporary workers felt somewhat positive about the way they were treated by their permanent co-workers (M = 4.63). Finally, the temporary employees in the sample indicated that they would accept a job from the organization that they were currently placed at if it were offered to them (M = 5.52). Means and standard deviations for the remaining survey items can be found in the appendix.

Organization characteristics as indicated by the supervisors: One hundred seventeen supervisors responded to the questionnaire. The average size of the organization where the supervisors worked was 8,361.85 employees, with a range from 7 to 760,000. A thorough breakdown of the industries represented in this sample can be found in Figure 3. One hundred one organizations used temporary workers and 16 did not. Of the organizations that used temporary employees, the average number of temporary workers in the organization on a typical day was 470.57, with a range of 1 to 38,000. The primary reason for why the organizations used temporary workers (as indicated by the supervisor) was to increase flexibility. Additionally, almost all supervisors indicated that their organization's layoff policy was favorable (i.e., 75 supervisors
indicated that the organization would not lay people off except as a last resort and 25 indicated that the organization strives to make minimal layoffs). Finally, 61 organizations had at least some form of compensation (may include bonuses) based on group performance and 55 did not. Means and standard deviations for the remaining survey items can be found in the appendix.

<table>
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<tr>
<th>Industry</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, and Fishing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mining (M)</td>
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<td>0.9</td>
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<td>Construction (M)</td>
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<tr>
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<tr>
<td>Manufacturing—Nondurable Goods</td>
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<td>9.4</td>
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<tr>
<td>Transportation and Utilities (S)</td>
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<td>2.6</td>
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<tr>
<td>Wholesale and Retail Trade (S)</td>
<td>9</td>
<td>7.7</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate (S)</td>
<td>14</td>
<td>12.0</td>
</tr>
<tr>
<td>Services</td>
<td>46</td>
<td>39.3</td>
</tr>
<tr>
<td>State and Local Government (S)</td>
<td>3</td>
<td>2.6</td>
</tr>
</tbody>
</table>

(M) indicates that this category was later collapsed with Manufacturing
(S) indicates that this category was later collapsed with Services

Figure 3: Industry of the Responding Organizations
Scale Computation

Scales were computed for many of the questionnaire items. Some of these scales, such as job satisfaction and commitment, have been used extensively in the literature. Other scales, such as perceived layoff policy and perceived organizational motives for using temporary workers, were created for this study. Reliabilities for all of the scales can be found in Figure 4. Most scales showed acceptable reliability levels for research purposes (Nunnally, 1978). The most notable exception was intention to turnover. Recall that the intention to turnover scale was adapted directly from the Handbook of Organizational Measurement, and in the past has shown adequate reliability (Cronbach’s alpha = .83). Nonetheless, when the three items that composed the scale were indexed, the reliability was .41. Analyses revealed that dropping one of the questions (i.e., How likely is it that you could find a job with another employer with about the same pay and benefits that you have now?) would significantly improve the reliability of the scale to more appropriate levels (alpha = .76). As a consequence, the decision was made to drop this one item and use only the other two. The perceived motives for organizational use of temporary workers and the perceived layoff policy also showed reliabilities that were slightly lower than desired. When the individual items that comprise these two scales were collapsed together the reliability increased to a more acceptable range. These two scales were thus combined for estimating the regression equations based on the model. A final scale that had slightly low, but acceptable, reliability levels was continuance commitment. The most likely reason for this outcome is because only two items that comprise this scale were used. The decision to use only two items from the continuance commitment scale in the questionnaire was made because of the secondary importance of this scale and the need to cut back on survey space.
<table>
<thead>
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<tr>
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<tr>
<td>Affective Commitment (PE)</td>
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<td>Continuance Commitment (PE)</td>
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<td>Turnover (PE)</td>
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<td>OCBs (TE)</td>
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<tr>
<td>PE Performance w/out OCBs (S)</td>
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<td>PE OCBs (S)</td>
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<tr>
<td>TE OCBs (S)</td>
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PE = permanent employees  TE = temporary employees  S = supervisor

Figure 4: Scale Reliabilities
Test of Hypotheses Based on and Underlying the Model

The first hypothesis stated that permanent workers will exhibit a variety of in-group biases toward their temporary co-workers. These biases were expected to lead permanent workers to favor members of their in-group (i.e., other permanent workers) while simultaneously perceiving out-group members (i.e., temporary workers) to be alike. The three measures used to assess these biases were the LIB, the allocation matrices, and the out-group homogeneity effect.

LIB: In order to determine whether permanent and temporary employees showed evidence for the LIB, their evaluations of the four sentences that described the positive and negative stories at different levels of abstraction were subjected to a mixed model ANOVA. Although permanent employees were expected to show the bias against temporary employees, no prediction was made as to whether temporary employees would show the bias against permanent employees. It seems likely that temporary employees would engage in in-group favoritism and perceptions of out-group homogeneity, just as permanent employees identify as members of an in-group. This situation is complicated, however, by the fact that most of the temporary workers in this sample would prefer permanent employment. When an out-group is desirous of in-group member status, the biases that the group members show toward the other group may be attenuated or even reversed. Thus, it seems possible that temporary employees may not show an in-group bias when evaluating permanent workers, but might even show a bias against their own group.

To test whether there were significant differences between temporary and permanent employees in the LIB, a four-way ANOVA was computed, with responding employee type as a between subjects factor, and target employee type, story valence, and level of abstraction as within subjects factors. The resultant 4 (sentence abstraction
level) X 2 (target employee type) X 2 (story valence) X 2 (responding employee type) ANOVA revealed no four-way interaction, $F(3,477) = .47$, $p = .70$, indicating that the LIB did not differ by responding employee type. That is, permanent employees and temporary employees were showing the same degree of bias in the LIB task. The predicted three-way interaction between abstraction level, employee type, and story valence did emerge, $F(3,477) = 4.62$, $p < .01$.

In order to decompose the three-way interaction, separate analyses of variance were then conducted at each level of abstraction. None of these analyses revealed any moderating effect of responding employee type on the interaction between story type and story valence, $F$’s $< 1$, $p$’s $>.40$, indicating that permanent and temporary workers were showing equivalent levels of bias toward temporary workers. Importantly, these analyses revealed the predicted and opposite interactions for both the most concrete descriptors ($F(1,159) = 4.55$, $p < .05$) and the most abstract descriptors ($F(1,159) = 4.98$, $p < .05$). Analyses also revealed non-significant interactions with the moderately concrete ($F(1,159) = 2.76$, $p < .10$) and moderately abstract ($F(1,159) = 2.57$, $p > .10$) descriptors (see Figures 5 and 6).

As can be seen in Figures 5 and 6, respondents showed a preference for abstract descriptions of expectancy-congruent events, but concrete descriptions of expectancy-incongruent events. That is, when the permanent employee’s behavior was positive or the temporary employee’s behavior was negative (expectancy congruent), the more abstract statements were preferred compared to when the permanent employee’s behavior was negative or the temporary employee’s behavior was positive (i.e., expectancy incongruent). The opposite pattern emerged with the more concrete statements.
In order to provide an example to help explain this pattern of results, consider the story of Garrett Hunter from Chapter Three. Recall that Garrett was a temporary employee who had done an exceptional job of collecting overdue credit card bills. The four statements that followed the story about Garrett ranged from the most concrete (i.e., Garrett has collected a great deal of money) to the most abstract (i.e., Garrett is a good employee). In this situation, employees were relatively willing to endorse the concrete statements but relatively unwilling to endorse the abstract statements. The exact opposite pattern emerged when Garrett Hunter was described as a permanent employee. This pattern of results is consistent with previous research on the LIB by Maass and her colleagues (1989; 1995), and extends that research to the domain of inter-group relations in the workplace.

The results from these analyses also reveal that temporary employees are exhibiting the very same biases against temporary employees that permanent employees exhibit toward them. Just like permanent employees, temporary workers were more willing to endorse abstract descriptors when they were paired with a positive permanent employee than when they were paired with a positive temporary employee, or when they were paired with a negative temporary employee than when they were paired with a negative permanent employee. The opposite pattern emerged with concrete descriptors.
Figure 5: Permanent Employees' Ratings on the LIB
Figure 6: Temporary Employees’ Ratings on the LIB
**Allocation Matrices:** In contrast to the LIB, which assesses implicit inter-group bias (Franco & Maass, 1996), the allocation matrices were used as a more explicit measure of in-group favoritism. Recall that employees were asked to distribute a series of bonuses among permanent and temporary employees. Because both permanent and temporary employees showed the LIB, the first step was to determine whether permanent and temporary employees show the same degree of bias toward temporary workers.

The ANOVA for the forced-choice allocation matrix revealed that permanent workers were more biased ($M = 4.64$) against temporary workers than were their temporary counterparts ($M = 5.79$), $F(1,145) = 46.66, p < .01$. The ANOVA for the non-forced-choice allocation matrix also revealed that permanent workers were more biased ($M = 4.23$) against temporary workers than were their temporary counterparts ($M = 6.11$), $F(1,146) = 20.31, p < .001$. The next step was to see whether the amount of bias that permanent employees and temporary employees are showing against their temporary co-workers is significant. For this analysis, the response scales were recoded so that absence of bias equaled zero. Specifically, for the forced-choice allocation matrix, 7.5 was subtracted from their score, and for the non-forced-choice allocation matrix, 7 was subtracted. A t-test was then conducted on each matrix to determine whether the allocations that were chosen differed significantly from the no-bias, zero point. The t-test for the forced-choice allocation matrix revealed that the allocations made by both permanent and temporary workers differed significantly from zero ($t(88) = -12.52, p < .001$, $t(57) = -5.54$, $p < .001$, respectively). The t-test for the non-forced-choice allocation matrix also revealed that the allocations made by both permanent and temporary workers differed significantly from zero ($t(87) = -10.62, p < .001$, $t(59) = -2.65$, $p < .01$, respectively). Thus, as with the LIB, the results of the t-test revealed that temporary workers also showed bias against temporary employees.
Outgroup Homogeneity: The final bias that was examined was outgroup homogeneity. This task required participants to indicate how often they witnessed permanent and temporary employees engaging in a variety of behaviors. Following the formula on page 51 to determine the standard deviation in each respondents' ratings, a 2 (responding employee type) X 2 (target employee type) mixed model ANOVA was conducted on the standard deviation for each of the four behaviors listed. The results for all ANOVAs revealed that neither permanent or temporary employees showed outgroup homogeneity (all $F$'s $< 2.03$, $p$'s $> .16$). One possible explanation for this null finding lies in the respondents' difficulty with the task. Although the instructions indicated that a number should be placed in every box, nearly 50% of the participants placed only one number in a box. As a consequence, the sample size for this analysis dropped dramatically, making it less likely to find outgroup homogeneity effects. Additionally, this task was placed at the end of the survey, perhaps at a point when participants were fatigued. Because of the poor response rate with this task the decision was made to drop the outgroup homogeneity measure from subsequent analyses.

Examination of the Bivariate Relationships: Prior to a full test of the model (depicted in Figure 1), the bivariate relationships that underlie the model were examined. The correlation matrix composed of all variables that were included in the model can be found in Figure 7. The discussion here is limited to the predicted relationships among the variables that were outlined in Hypotheses 2 through Hypotheses 7. Recall that in Hypothesis 2 the permanent employees' perception of why the organization is using temporary workers and the perceived layoff policy was predicted to influence the perceived threat posed by the presence of temporary employees. Initial support was found for this hypothesis, with employees reporting that they were more threatened by the presence of temporary co-workers when the
organization's motives for using temporary employees were perceived to be inappropriate and when the organizational layoff policy was viewed unfavorably. The other variable that was expected to influence the perceived threat posed by the presence of temporary co-workers was the organizational rank of the temporary worker compared to that of the permanent employee. Consistent with this prediction, the higher the rank of the temporary co-worker compared to the employee, the more likely it was for the employee to feel threatened by the presence of temporary employees.

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<td>.34*</td>
<td>.07</td>
<td>1.0</td>
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</table>

* p < .05   ** p < .01   (N in parenthesis)

Figure 7: Correlations Among Variables in the Model
The perceived threat posed by the presence of temporary employees was expected to lead to increased bias on the part of permanent workers toward their temporary co-workers. Recall that both implicit (i.e., the Linguistic Intergroup Bias) and explicit biases (i.e., allocation matrix) were revealed by permanent workers. Unfortunately, threat was only related to the degree of bias shown with the first of the two allocation tasks (the forced-choice matrix; $r = .29, p < .05$). This finding is consistent with the earlier possibility that the forced-choice matrix would be more sensitive to bias, and thus, the decision was made to drop the second allocation matrix from subsequent analyses. The bias that permanent employees exhibited with regard to temporary employees was expected to directly influence the behaviors that they display toward their temporary co-workers. No bivariate relationships emerged between any of the exhibited biases and behaviors.

The level of interaction that permanent employees have with their temporary co-workers was expected to lead to more accurate perceptions of why temporary employees are working in a temporary capacity (either voluntarily or involuntarily). Given the high rate at which temporary employees were working involuntarily, however, interaction with this sample may not lead to significant differences in evaluation. That is, if almost all temporary employees are involuntary, and if that is the most common belief held by permanent employees (Feldman, et al., 1994), it seems very unlikely that increased interaction with the temporary workers will lead to any increase in sensitivity on this measure. Consistent with this possibility, no relationship emerged between reported interaction with the temporary worker and employees' beliefs about why their temporary co-workers were working as such ($r = .03, p > .80$). This relationship was also examined with the supervisor's rating of interaction between the permanent and temporary worker who were asked to complete the survey. Again, the correlation was not significant ($r = .08, p > .51$). Because there was little variance
in the measure of why temporary employees were working in that capacity, the path from interaction with temporary employees to perceptions of why they were working in a temporary capacity was removed from the model. Additionally, because interaction as reported by both the permanent employee and supervisor were not correlated with any of the other items in the model the decision was made to not include these in the correlation matrix in Figure 7.

The final relationship that was hypothesized to emerge in the model was between the permanent worker's perceptions of why his co-worker was working in a temporary capacity and his behavior toward the temporary employee. Recall that employees were expected to behave more positively toward their temporary co-workers when the temporary workers were thought to be involuntary. This relationship emerged when behavior was operationalized as how the permanent employee reported treating the temporary worker, and when behavior was operationalized as how the temporary workers reported they were treated by their permanent co-workers.

**Regression based causal model:** The bivariate relationships previously discussed demonstrate support for some aspects of the model and not others. To test the model adequately, however, it was necessary to construct a causal model. Regression based causal modeling, as outlined by Baron and Kenney (1986), was used to test the model. The results from the path analysis can be seen in Figures 8 and 9.
Figure 8: Model Results

† p < .10  * p < .05  ** p < .01
Dependent Variable: Perceived Threat Posed by Temporary Employees

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<th>B</th>
<th>SE B</th>
<th>Equation R²</th>
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Dependent Variable: Allocation Matrix

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Dependent Variable: Linguistic Intergroup Bias

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Dependent Variable: Self-Reported Behavior

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Dependent Variable: Temporary Reported Behavior

<table>
<thead>
<tr>
<th>Independent Variables</th>
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<th>SE B</th>
<th>Equation R²</th>
<th>N</th>
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<tr>
<td>LIB</td>
<td>.03†</td>
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<td>Allocation Matrix</td>
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</tbody>
</table>

† p < .10  * p < .05  ** p < .01

Figure 9: Regression Based Causal Model Statistics
As can be seen in the model, when the perceived motives and layoff policy were regressed with the position of the temporary worker on the perceived threat of temporary employees, both variables predicted unique variance in perceptions of threat. This finding is consistent with Hypotheses 2 and 3. 1 When threat was regressed on the different measures of bias that permanent workers exhibited toward their temporary co-workers, the predicted effects only partially emerged (partial support hypothesis 4). Specifically, the allocation task was predicted by the degree of threat that permanent workers felt, but the LIB was not.

The final step in the model, predicting the behavior that permanent employees exhibit toward their temporary co-workers, also showed mixed support. The bias shown by permanent workers only partially predicted their behavior toward their temporary co-workers (partial support hypothesis 7). Specifically, the allocation matrix predicted permanent employees’ self-reported behavior toward their temporary co-workers, and the LIB marginally predicted behavior reported by the temporary employee. Permanent employees’ perceptions of why the temporary employee was working in such a capacity did predict behavior. When permanent employees believed their temporary colleagues were working in that capacity involuntarily, they were more inclined to treat the temporary employee more positively. This relationship emerged both with the permanent employees’ self-reported behavior and with the temporary employees’ report of how they were treated by their permanent co-workers (support for hypothesis 6).

In sum, perceived motives, layoff policy, and the relative rank of the temporary employee had the predicted impact on threat, but threat was only partially related to the

---

1 The motives and layoff policy as reported by the supervisor were also examined but no significant relationships emerged. The variance on these items was very small, however, as was noted earlier.
biases that permanent workers exhibited. These biases only partially predicted behavior towards temporary workers, but perceptions of why the individual was working as a temporary employee did reliably predict behavior.

*Additional analysis based on the model:* Recall that Hypothesis 8 states that threat might moderate the relationship between perceptions of temporary employee type and behavior. The unmoderated hypothesis is that permanent employees will behave more positively toward involuntary temporary workers. But, as noted above, if a permanent employee feels threatened by the presence of temporary co-workers, she might behave more negatively to involuntary temporary workers, as they may seem like more of a threat. This possibility was tested by creating an interaction term that represented the product of the centered versions of the perceptions of employee type and threat variables. This interaction term was then regressed, with the main effects in the model, on the behaviors toward the temporary employee (see Aiken & West, 1991).

Although the interaction was not significant in predicting permanent employees' self-reported behavior, the interaction term did predict behaviors reported by the temporary workers, (β = -0.2, p < 0.01). In order to decompose this interaction, two separate regression equations were computed as a function of level of threat. The first equation involved those employees who were below the median in level of threat they experienced from their temporary co-workers, while the second equation involved those above the median. Among permanent workers who were not threatened by the presence of temporary co-workers, behavior toward the temporary employees became more favorable as a function of the belief that the temporary employee was involuntary (β = 0.55, p < 0.01). In contrast, among employees who were threatened by their temporary co-workers, behavior toward the temporary employees became more unfavorable as a function of the belief that the temporary employee was involuntary (β = -0.50, p < 0.05). This finding reveals that perceptions of why people choose to
work in a temporary capacity does not have a simple linear relationship with the behaviors that are exhibited toward their temporary co-workers. Rather, this relationship is moderated by how threatening the employees finds their temporary co-workers to be.

Because behavior was the final dependent variable in the model, the decision was made to examine another variable that had the potential to affect behavior. Specifically, it may be the case that employees who work in organizations that use some form of group-based compensation predicated on performance would not show differences in their behaviors regardless of their perceptions of temporary employee type. This possibility is suggested because the permanent employee may feel that any behavior on her part which diminishes the performance of the temporary worker would ultimately affect her own compensation. To test this possibility, whether the organization uses any form of group compensation was simultaneously regressed with perceptions of employee type on behavior. Group compensation was not a significant predictor of permanent employee’s self-reported behavior (beta = .01, p > .95) or permanent employee’s behavior as reported by the temporary workers (beta = .11, p > .45).

**Demographic and organizational context relationships with the model variables:**

Although no predictions were made for how the demographic variables or organizational context variables might influence the constructs investigated in the model, exploratory analyses were conducted to try to gain insight into this issue.

A number of demographic variables were measured with the permanent and temporary employees, while the supervisors were asked about aspects of the organization. Each of these variables was correlated with the constructs in the model to examine possible effects created by the organizational context or the demographic characteristics of participants. To begin with the organizational context variables, the results from this correlation matrix can be found in Figure 9. Supervisors were asked
about the size of the organization (Size), as well as how many temporary employees work in the organization (Org TE) and their area (Area TE) on a typical day. A positive relationship emerged between the number of temporary workers in the area and the permanent employees' reported behavior toward the temporaries, such that permanent employees reported more positive behavior when more temporary workers were in the area. Additionally, as the number of employees in the organization increased, and as the number of temporary workers in the organization increased, so did the position rank of the temporary employee (compared to the rank of the permanent employee who completed the survey). Finally, those employees who worked in manufacturing, as opposed to service oriented firms, were less likely to feel that their permanent co-workers desired permanent jobs.
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<th>Area TE</th>
<th>Size</th>
<th>Grp $</th>
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</table>

* p < .05  ** p < .01  (N in parenthesis)

Figure 10: Correlations of Model Variables with Organizational Context Variables

A number of significant relationships were found with regard to the demographic characteristics of permanent employees. The correlation matrix from this analysis can be seen in Figure 10. This analysis revealed that older permanent employees and more senior permanent employees tended to view the motives for using temporary employees and the layoff policy of their organization more negatively. Interestingly, women tended to be more likely than men to believe that temporary employees work in that capacity out of choice. Perhaps women are more likely than men to recognize the flexibility inherent in temporary work, whereas men—who are historically the primary
money earner for the family—assume that people would only work as temporaries if they had no other choice. The final relationship that was significant was between the tenure of the permanent employee and the relative rank of their temporary co-workers. Not surprisingly, employees who had been with the organization longer were less likely to have temporary workers in positions equal to or above their own.

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</table>

* p < .05  (N in parenthesis)

Figure 11: Correlations of Model Variables with Demographic Characteristics of Permanent Employees

92
The final set of demographic variables that was examined dealt with the temporary employees who completed the questionnaire. The results from this analysis can be found in Figure 11. As can be seen in the figure, as the tenure of the temporary workers increased (as a temporary employee), it became less likely that they would be in a position that was equal to or greater than that of their permanent co-workers. This finding may seem counter-intuitive, but it is possible that temporary workers who have worked in that capacity longer do so because their skill levels are not as high, and thus it is more difficult for them to find a permanent job.

<table>
<thead>
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<th>Orgnz Tenure</th>
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<td>(61)</td>
<td>(62)</td>
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* p < .05 (N in parenthesis)

Figure 12: Correlations of Model Variables with Demographic Characteristics of the Temporary Employees

93
Subsidiary Predictions

Hypotheses 9 and 10: Recall that the job attitudes and supervisor-rated performance of permanent employees who have temporary co-workers were expected to differ based on whether new temporary workers were constantly entering the organization (Hypothesis 9) and whether a great deal of energy must be expended on training the temporary worker (Hypothesis 10). These two hypotheses were tested by estimating a series of regression equations. The attitudinal dependent variables were job satisfaction, affective commitment, continuance commitment, and intention to turnover. The supervisor rated performance dependent variables were overall performance and OCBs. The results of these analyses can be seen in Figures 12 and 13.

Two predictors were used for testing hypothesis 9. The first measure was a self-report of permanent employees’ level of frustration with the number of temporary employees who come and go. The second measure was temporary employees’ tenure with the organization at which they were currently placed. Although this is an imperfect measure of the actual number of temporary employees who are coming and going, it does allow for a more objective indicator. As can be seen in Figure 12, a positive relationship emerged between the tenure variable and affective commitment and the supervisor’s performance rating for the permanent employee. This finding reveals that permanent workers’ self-reported affective commitment is higher and their performance is better the longer the temporary employees stay with the organization.

Two of the supervisor performance variables were also related to the permanent employee’s frustration with the number of temporary employees entering the organization. Given the direction of this effect (i.e., permanent employees’ performance is rated as more favorable the more frustrated they are with temporary
employees' transience), the significance of it is questionable, however. Overall, these results indicate that the rate of flow of temporary workers into the organization is not strongly related to the job satisfaction, commitment, or performance of permanent workers. Thus, minimal support was found for hypothesis 9.

<table>
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<tr>
<td>Intention to Turnover</td>
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<tr>
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</tbody>
</table>

* p < .05

Figure 13: Hypothesis 9 Regression Results

Minimal support was also found for hypothesis 10. A negative relationship emerged between the workload variable and affective commitment. This finding reveals that employees' self-reported affective commitment is higher to the degree that employees feel that the presence of temporary workers has diminished their workload. The beta weight is negative because the workload item was framed negatively. A
positive relationship emerged between the workload variable and the behavior that
temporaries say permanent employees exhibit toward them. This finding reveals that
permanent employees treat the temporary employees more negatively when they feel
that their presence has not diminished their workload. These same pattern of
relationships did not emerge, however, when examining the degree of effort employees
feel they expend to “train” the temporary employee. Thus, only minimal support was
found for hypothesis 10.

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<td>Overall Performance (w/OCB)</td>
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</tr>
<tr>
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</table>

* p < .05

Figure 14: Hypothesis 10 Regression Results
Validation of the measures: Although job attitudes are important in their own right, their importance grows substantially to the extent that they predict performance. Additionally, examination of the attitude-performance relationship seems worthwhile as there may be differences in the relationship between job attitudes and performance across the permanent and temporary employee populations. In order to examine these issues, separate correlation matrices were computed among temporary and permanent employees (see Figures 14 and 15). Performance in the table refers to the supervisor’s rating of the employee on a variety of dimensions (e.g., attendance, quality of work) while the combined variable represents a scale which combines the OCBs and performance. The reliabilities for all of these scales were presented in Figure 4. For permanent employees, both continuance commitment and affective commitment predicted the supervisors’ ratings of performance. The nature of these relationships, not surprisingly, was opposite to one another. That is, as affective commitment increased so too did performance, while an increase in continuance commitment was associated with lower performance. A relationship also emerged between job satisfaction and performance, which is surprising given the frequency with which this relationship has been investigated with a concomitant failure to find this relationship (Iaffaldano & Muchinsky, 1985). In contrast, a relationship has been shown between OCBs and job satisfaction (Bateman & Organ, 1983), which was not replicated in the current study.
<table>
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<td>-.23*</td>
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<td>.23*</td>
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<tr>
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<td>-.06</td>
<td>-.04</td>
</tr>
</tbody>
</table>

* \( p < .05 \)  ** \( p < .01 \)  \( N = 87 \)

Figure 15: Correlations Between Job Attitudes and Performance for Permanent Employees

The supervisors' ratings of performance of temporary employees was not related with the commitment or satisfaction of the temporary worker. This lack of a relationship was also evident when supervisor's confidence of their reported performance was taken into account. This difference in the predictive ability for temporary and permanent employees' job attitudes is explored further in the discussion section.
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<td>-.06</td>
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N = 52

Figure 16: Correlations Between Job Attitudes and Performance for Temporary Employees

Interrelationships among the variables: The interrelationships among the attitudinal variables were then examined separately among the permanent and temporary employee populations. The correlation matrices from these analyses can be seen in Figures 16 and 17. For permanent employees, job satisfaction was positively related to affective commitment, such that more satisfied workers were also more committed to the organization. In contrast, job satisfaction was negatively associated with turnover,\(^2\) as less satisfied employees were also more likely to indicate the desire to look for a new job. Finally, affective commitment was negatively associated with continuance commitment and the intention to turnover. This finding suggests that employees who are affectively committed to the organization are less likely to indicate a desire to leave the organization.

\(^2\) The satisfaction scale used for this analysis differed somewhat from the original scale because of the overlap of one item with the turnover scale. Thus, the offending variable was removed to create a new index of job satisfaction. All other analysis use the original job satisfaction scale.
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\* \( p < .05 \) \*\* \( p < .01 \) \*\*\* \( p < .001 \) \( N = 99 \)

Figure 17: Correlations Among the Job Attitude Variables for Permanent Employees

For the temporary employee sample a similar pattern of results emerged. That is, satisfaction was positively related to affective commitment. Intention to turnover was not examined with the temporary employee sample. Not surprisingly, affective and continuance commitment were negatively related to one another.

<table>
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<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Job Satisfaction</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Continuance Commitment</td>
<td>-0.12</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>3. Affective Commitment</td>
<td>0.46***</td>
<td>-0.35**</td>
<td>1.0</td>
</tr>
</tbody>
</table>

\*\* \( p < .01 \) \*\*\* \( p < .001 \) \( N = 66 \)

Figure 18: Correlations Among the Job Attitude Variables for Temporary Employees
CHAPTER 5

DISCUSSION

This dissertation has studied some of the consequences of a blended workforce. Previous research suggests that temporary workers have largely negative effects on permanent employees (e.g., Davis-Blake, et al., 1994; Smith, 1994). Although this literature delineates a variety of costs associated with a blended workforce, there is little work that bears upon the psychological causes of these costs. What is it about a blended workforce that disrupts the performance and morale of permanent workers, and why? The goals of this dissertation were to explore the conditions under which a blended workforce is likely to lead to negative outcomes, why these conditions lead to negative outcomes, and how these conditions exert their impact.

Several factors were hypothesized to directly and indirectly influence the attitudes and behaviors that permanent employees exhibit toward their temporary co-workers. Specifically, the perceived organizational motives and policies with regard to temporary employee usage were predicted to influence how threatened permanent employees feel by the presence of temporary co-workers. This perception of threat was predicted to influence the biases that permanent employees show with regard to their temporary co-workers. These biases, in turn, were expected to influence the behaviors that permanent employees exhibit toward their temporary co-workers.

This discussion section is divided into three major sections. First, I highlight the major findings in the dissertation. After reviewing each finding, I discuss the
implications of the finding for organizational practice. The second section discusses the limitations and strengths of the current study, focusing primarily on the research design. The final section discusses general implications for future research.

In-Group Biases

**Findings:** Recall that the model assumed the presence of in-group biases. That is, although the model described a series of inter-related factors that were thought to exacerbate in-group biases, in-group biases were expected to be ubiquitous and thus present even in the absence of those factors depicted in the model. As such, the first hypothesis proposed the existence of three different in-group biases. Both implicit (LIB) and explicit (allocation matrices) measures of in-group favoritism were assessed in addition to a measure of out-group homogeneity. The implicit measure of bias revealed that participants were more willing to make abstract inferences from positive permanent employee behavior and negative temporary employee behavior than from negative permanent employee behavior and positive temporary employee behavior. This finding suggests that positive behavior by permanent employees and negative behavior by temporary employees will have a larger impact than negative behavior by permanent employees and positive behavior by temporary employees on the impressions formed by permanent employees (see Maass et al., 1989; 1995).

The explicit measure also revealed bias, as permanent employees tended to favor permanent employees when distributing bonuses and raises. Although evidence of in-group favoritism from both implicit and explicit measures emerged, evidence for out-group homogeneity effects was not found. Recall, however, that nearly half of the sample did not complete the out-group homogeneity task correctly. This misunderstanding of task instructions reduced the sample size to such a degree that the evidence for out-group homogeneity became both unlikely and uninterpretable (because
of the substantial self-selection effect). As a consequence, it is impossible to know whether out-group homogeneity effects would have emerged under different circumstances.

The finding that threat was associated with the degree of explicit bias shown by permanent employees is consistent with research of Fein and Spencer (1997), who demonstrated that people are more likely to behave in a prejudiced fashion when they experience threat to their self-esteem. One way that individuals are able to bolster their damaged self-esteem is by denigrating members of their out-group. The presence of temporary workers can be damaging to permanent employees’ self-esteem if they worry that their position can or will be replaced by a temporary co-worker. In order to compensate, permanent employees may denigrate their temporary co-workers by deciding that they are incompetent, and thus undeserving of an equal share of the bonus in the allocation task.

Perhaps more interesting than the finding that permanent employees showed ingroup favoritism was the finding that temporary employees showed out-group favoritism. A large body of research has demonstrated that people show in-group favoritism even under minimal group circumstances, when the basis for group membership is completely meaningless. For example, people favor members of an in-group that they believe is composed of people who make similar judgments when estimating the number of dots on a canvas (see Brewer, 1979). Given this overwhelming tendency for people to favor their in-group, it is indeed unusual that the temporary employees favored their out-group. The temporary employee sample, as was discussed earlier, was overwhelmingly composed of involuntary temporary employees. In this light, it might make more sense that the temporary employees favored the group whose membership is sought after by themselves. This finding also suggests that perhaps temporary employees do not define other temporary workers as
fellow in-group members. After all, it is likely that most temporary employees have been employed in a permanent capacity at some point in their lives, and thus they might see themselves as “permanent employees who happen to be currently employed in a temporary capacity.” If this is the case, then temporary employees probably consider permanent employees their fellow in-group members, despite the fact that they are not considered fellow in-group members by their permanent co-workers. The unfortunate consequence of this situation is that both permanent and temporary workers are biased against temporary workers.

Another explanation for the out-group favoritism among temporary employees can be found in recent research on Realistic Group Conflict Theory. This research has demonstrated that in-group identification is correlated with out-group negativity when relations between groups involve competition and perceived threat (Duckitt & Mphuthing, 1998). This finding confirms recent experimental, laboratory research that also showed that the association of in-group identification with out-group negativity is more likely when intergroup competition and threat occur (Branscombe & Wann, 1994; Grant & Brown, 1995). If temporary employees do not feel strongly identified with their in-group, as has been argued above, then these findings suggest that they would be unlikely to show out-group negativity. Indeed, the findings of the current research extend the research on Realistic Group Conflict Theory by suggesting that when members of a group identify more strongly with an out-group than with their in-group, under situations of group conflict they might actually show out-group favoritism.

Because the sample of temporary workers in this research was composed almost entirely of involuntary temporaries, it cannot be ascertained whether voluntary temporary employees would have favored other temporary employees, or showed out-group favoritism. It is possible that voluntary temporary employees would show typical in-group favoritism. Because they are not desirous of membership in the out-
group, they are unlikely to define themselves as out-group members, and thus there would be no reason to expect the reversal in bias that emerged among involuntary temporary employees.

**Implications for Practice:** Although it is not surprising, and was indeed expected, that permanent employees would show in-group biases with regard to their temporary co-workers, this finding does have implications at a practical level. As temporary workers become a more commonplace component of the workplace, organizations are increasingly likely to strive to create a harmonious environment between their temporary and permanent employees. The current findings suggest that they might find such harmony difficult to achieve. The presence of both implicit and explicit biases suggests that the permanent/temporary schism is difficult to overcome, but depending on the circumstance, it might be possible. When the inter-group biases are weak it might be possible to reduce the bias through contact and cooperation between the permanent and temporary employees.

On the other hand, when the inter-group biases are strong and entrenched, the goal of eliminating such bias may be unrealistic. Instead, it might be more reasonable to try to create situations in which the bias will be least likely to impact the organization. For example, in an organization where bias is likely to be strong (i.e., permanent workers feel threatened by the presence of temporary workers), temporary work could be arranged in such a way that there is minimal interaction with the permanent workers. Bank One, for example, incorporates such a situation in their debt collection department where the phones are staffed almost entirely by temporary workers. By limiting the interaction between temporary and permanent employees, the bias demonstrated in this research should be minimized. Thus, although permanent employees' in-group
favoritism has the potential to strain work relations with their temporary co-workers, the organization can take steps to try to minimize this strain when it is likely to be particularly strong.

The finding that temporary employees showed out-group favoritism (discussed more fully in the implications for future research directions section) has implications for practice as well. The current results suggest that temporary employees do not identify as a group. Indeed, they showed out-group favoritism at a conscious and unconscious level. These findings call into question the feasibility of unionizing temporary employees, which has been discussed recently in the media. It seems likely that unionization requires at least a rudimentary sense of group identity, yet the results of this dissertation show that temporary employees not only lack group identity, but would prefer to be a member of a different group (i.e., permanent employees). As such, it would be an arduous process to unionize temporary workers. The theoretical implications of this finding are discussed in more detail in the implications for future research section.

The Model

Findings: The model was an attempt to predict a variety of inter-related factors that can exacerbate in-group biases on the part of permanent employees toward temporary employees. Several factors were proposed to influence the degree to which permanent employees show in-group biases, and a variety of direct and mediational effects were expected to emerge. Although the results were weaker in some parts of the model than others, at least partial support was found for all aspects of the model. Specifically, employees felt more threatened to the degree that the perceived layoff policy and motives for using temporary workers were deemed inappropriate, and employees felt more threatened when the position of temporary employees was equal to or above their
own rank. Feeling threatened, in turn, made permanent employees more likely to show explicit in-group biases, although threat did not affect the degree to which they showed implicit in-group biases. Implicit and explicit biases were uncorrelated with one another, and implicit biases predicted whether the temporary employees reported that they were treated negatively, whereas explicit biases predicted whether the permanent employees reported that they treated the temporary employees negatively. Finally, when permanent employees perceived their temporary co-workers to be involuntary they treated the temporary employees more positively.

It was initially proposed in the model that permanent employees' interactions with their temporary co-workers would predict permanent employees' beliefs about whether their temporary co-workers were voluntary or involuntary. It became necessary to remove this proposed relationship, however, because of the lack of variance among temporary employees' self-report of whether they were voluntary or involuntary. Increased interaction would have virtually no effect on permanent employees' perceptions under this circumstance, because almost all temporary employees indicated that they were working as such involuntarily. Because this state of affairs is consistent with the stereotype held by permanent employees toward temporary employees, permanent employees with either little or extensive interaction with temporary employees would both be likely to feel that the temporary employees are involuntary.

The finding that almost all temporary employees were involuntary is somewhat surprising in light of previous work by von Hippel et al. (1997; in press), who found a reasonable amount of variance in the degree to which temporary employees were voluntary or involuntary. Furthermore, the voluntary/involuntary distinction in that research was related to different sources of job satisfaction. It is possible, however, that there is more variance in a sample of all employees who work at a temporary agency (as in von Hippel et al., 1997, in press) than in a sample of temporary
employees who are employed on site and are known well enough by a supervisor to be selected for this survey (this issue is discussed in more detail in the limitations section). Regardless of the reason, it was necessary to remove this link from the model because of the restriction in range in the desire to be a permanent employee, and the consequent impossibility of finding a relationship here.

These findings have a variety of implications for previous research examining the consequences of temporary workers on permanent employees' attitudes. For example, recall that permanent employees who work alongside temporary employees are more likely to indicate a desire to unionize than permanent employees who do not work in a blended environment (Davis-Blake et al., 1994). Davis-Blake et al.'s explanation provided for this finding was that the employees are concerned about management's intentions regarding their job security. The findings in this dissertation do not rule out this interpretation, yet they suggest that this effect might be moderated by employees' beliefs regarding the organization's motives for using temporary employees. Specifically, the current results suggest that employees who work in a blended workforce should be more likely to unionize when the organization's intentions for using temporary employees are also deemed inappropriate, whereas this effect should not emerge when the intentions for using temporary employees are deemed appropriate. Layoff policies and the relative rank of the temporary workers should also moderate this relationship in a similar fashion.

Blended workforces also reduced permanent employees' intentions to remain at their job (Davis-Blake et al., 1995). Interestingly, in Davis-Blake et al.'s study, this effect was limited to the presence of temporary medical employees, and did not emerge when temporary clerical employees were blended into a medical workforce. Davis-Blake et al. explain this finding by suggesting that when temporary workers are used in the "technical core" it is more disruptive for permanent employees. They propose that
the permanent workers may be required to “teach” those temporary employees before they can do their own jobs, which in turn increases the work load of permanent employees. Although not mentioned by Davis-Blake, it also seems likely that temporary medical employees might have posed a greater threat to the perceived job security of permanent employees working within the company’s technical core because of their relative rank and centrality to the company compared to the permanent workers. Consequently, temporary medical employees may have had a more disruptive effect on the permanent employees’ morale and their perceptions of the company’s commitment to them. This explanation, although not offered by Davis-Blake et al., is consistent with the findings in this dissertation.

Research by Porter (1995) distinguished the situations under which contingent workers are appreciated by permanent employees. Recall that in her four-quadrant matrix, contract workers’ performance is crossed with the organization’s motives for using them. The optimal situation emerges when the organization’s perceived motives for using contingent workers are virtuous (e.g., trying to alleviate stress on overworked employees) and when contingent employees are perceived as working effectively. In situations such as this, the attitudes of permanent employees who work with contingent workers were equally positive as those employees who do not work in a blended environment. In contrast, when the organization’s motives for using contingent workers are deemed inappropriate (e.g., using contingent workers to cut costs, or hiring temporary employees as a first step in replacing permanent workers), and when contingent workers’ performance is not up to par, the attitudes of those employees who work in a blended area were much more negative than those employees who do not. Additional support for these ideas is provided by the results of this dissertation, in which organizational motives had an effect on the level of threat, which in turn influenced permanent employees’ attitudes toward their temporary co-workers.
Recall that Porter found that when the motives on the part of the organization are deemed to be inappropriate and the contingent workers are high performing, the permanent employees may begin to feel threatened. This finding is conceptually similar to the results of this dissertation, in which threat was found to moderate the relationship between perceived type of temporary employee and permanent employees' behavior toward their temporary co-workers. Specifically, Porter's work suggests that generally, employees prefer high performing temporary workers. This relationship changes, however, when the organization's motives for using temporary workers are deemed inappropriate. Under this circumstance, permanent workers seem to prefer low performing temporary employees. Similarly, this dissertation illustrates that in general involuntary temporary employees are preferred, presumably because these individuals will take their jobs more seriously because they are hoping to gain a permanent job. This relationship also changes, however, when employees feel threatened by their temporary co-workers. Under these conditions, permanent employees actually prefer voluntary temporary employees presumably because they are less of a threat to their job security.

Implications for Practice: The most obvious and meaningful implication of the model is that temporary employees do not have a uniform effect on the attitudes and behaviors of their permanent co-workers. Under some circumstances temporary employees will be disruptive, but not under all circumstances and not all of the time. For example, the model indicates that permanent workers are less likely to behave negatively toward their temporary co-workers when they are not threatened by the presence of temporary employees. The model also suggests that permanent employees do not feel particularly threatened by temporary co-workers when the organization's motives for using temporaries are deemed appropriate and when the layoff policy is
favorable. Thus, under these circumstances temporary employees are relatively unlikely to have a substantial negative effect on their permanent co-workers.

These data suggest that before an organization makes a decision about whether to increase flexibility or cut costs by turning to the temporary segment of the workforce, an analysis of the situation should be made to fully understand the implications of the decision. If the organization’s layoff policy is favorable and the motives for using temporary workers is deemed virtuous, the presence of temporary workers should not be threatening to the permanent employees. Threat also should not be invoked when temporary employees are being brought into the organization in positions lower than those of their permanent colleagues. Nonetheless, the current research suggests that permanent employees show some bias toward their temporary co-workers even in the absence of threat. Thus, even a favorable organizational context does not provide a fool-proof setting for the creation of harmony between temporary and permanent workers.

Also of importance is the type of temporary employees who are placed in the organization. Employees’ behaviors are more positive to the degree that they perceive the temporary employees to be involuntary, perhaps because they believe these temporary employees are taking their job more seriously. Permanent workers may feel that their time is not wasted trying to bring a new temporary worker up to speed if they feel the temporary worker would prefer to remain on the job as long as possible. As is discussed in the future directions section, however, this situation is also less straightforward than it first appears to be. Nonetheless, this finding suggests that certain temporary employees are treated better than others, a result that could have important implications for the performance of the temporary workforce.\(^3\)

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\(^3\) Indeed, a marginal correlation emerged between how temporary employees report that they are treated and their performance as rated by their supervisor ($r = .25, p < .07$), and a significant correlation emerged between how temporary employees report they are treated and how much they report engaging in OCB’s ($r = .64, p < .001$).
Many temporary employees have complained about the disrespect they receive at organizations (see Feldman, 1995). These complaints are not surprising in light of the current findings regarding how temporary employees are treated by their permanent co-workers. The negative behaviors on the part of permanent employees toward their temporary co-workers may undermine the benefits accrued from using temporary workers. In many circumstances, such as when work tasks are interdependent, temporary and permanent employees need to work together harmoniously so that the benefits from temporary worker usage can be realized.

These findings also have implications for staffing organizations. As was discussed earlier, there are a variety of reasons why organizations might use temporary workers (e.g., to increase flexibility or to decrease costs). For each of these reasons, however, temporary workers are only one of several options (Cappelli, Bassil, Katz, Knoke, Osterman, & Useem, 1997). For example, to increase flexibility an organization might hire temporary employees or it might decide to train employees for multiple jobs within the organization so they can be shifted to various parts of the organization as the need arises. Alternatively, the organization may decide to have a certain number of “floaters” who are trained in multiple areas and can be shifted throughout the organization wherever the need arises. Despite the large number of choices at an organization’s disposal, the vast majority of organizations are expanding their options by turning to the temporary workforce. Yet the current results call attention to a number of possible consequences of temporary employee usage. Depending on various organizational policies, temporary workers might cause permanent employees to feel threatened. This feeling of threat, in turn, causes permanent employees to engage in in-group biases, which lead to a variety of negative outcomes.

A recent ruling involving Microsoft creates more confusion with regard to whether a position should be staffed by a temporary employee. This ruling forces Microsoft to
offer stock options to any temporary employee who has worked for the company for at
least five months and twenty hours per week over a one year period. The court is now
deciding whether 401k benefits must be given to the temporary employees as well.
Clearly, the obligations and liabilities of “co-employment” relationships have not been
specified as of yet, and thus the legal ramifications of temporary employee usage are
still unknown. This ruling suggests that organizations may be required to offer
temporary employees many of the same benefits that permanent employees are
afforded. As such, the cost savings of temporary employees is greatly reduced, if non-
existent. This possibility, coupled with the findings in this dissertation, suggests that
temporary employees should not be considered at the expense of other options for
creating staffing flexibility. Temporary employees can still allow organizations
flexibility, but over-use of this segment of the workforce may not provide the
organization with the benefits they are hoping to reap.

Methodological Limitations and Strengths of the Study

Limitations: An important limitation in the current study deals with the data
collection strategy that was employed. Because only a small number of people were
selected from each organization to participate, and more importantly, because these
people were not randomly chosen, restriction of range in the measures may have
occurred. Although the individuals who were asked to bring the surveys back to their
organization were not systematically selected, these individuals were likely to be
selective in who they asked to complete the surveys. That is, it would be very unlikely
for the survey distributor to ask disgruntled managers to complete the questionnaires.
Thus, the managers who were asked were probably relatively satisfied, productive, and
trusted organizational members. The managers, in turn, were likely to use similar
standards when determining which permanent employees and temporary employees to
ask to complete the questionnaire. Thus, it is possible that only the most satisfied and productive members of the organization were solicited for participation. This restriction in range would then reduce the likelihood of finding the various relationships proposed in the model. Perhaps the fact that only partial support was found for various portions of the model, and other subsidiary hypotheses did not receive support, is in part due to the potential restriction in range created by the solicitation method chosen.

Another important limitation deals with the operationalization of certain constructs. As means of an illustration recall that the attitudes and performance of permanent employees were expected to vary based on whether new temporary workers were constantly entering the organization. This hypothesis did not receive strong support. Slightly more support was found for the hypothesis that expending a great deal of energy training temporary workers would negatively affect attitudes and performance of permanent workers. Recall that energy expenditure was operationalized two different ways. When examining permanent employees' self-reported frustration (i.e., "I get frustrated with the number of temporary employees who are coming and going") no support was found for this hypothesis. When energy expenditure was operationalized as the perceived helpfulness of having temporary employees around (i.e., "The presence of temporary workers has not diminished my workload"), however, support was found for this hypothesis. Specifically, affective commitment was higher to the degree that employees felt that the presence of temporary workers has diminished their workload. Additionally, the behavior that temporary workers say permanent employees exhibit toward them was more positive when permanent employees felt that temporary employees have diminished their workload. It is possible, however, that this "workload" question might be tapping a variety of factors other than the role of permanent employees in training their temporary colleagues. For example, it seems possible that this question might be sensitive to factors such as the competency of the
temporary employees, and the role that they occupy in the organization. Thus, it seems that the operationalization of certain constructs might have been more tightly tied to the variables of interest.

The lack of support for the hypothesis that frustration with the number of temporary employees entering the organization affects job attitudes and behavior is surprising, given the intuitive appeal of this prediction. It is possible, however, that similar contextual variables surrounding temporary workers' employment at the organization do influence the attitudes, behaviors, and performance of permanent employees, but perhaps the proper variables were not measured or were not measured correctly.

Another example of this limitation deals with the more tenuous links in the model that were found from threat to bias and bias to behavior. The weakness of these links could have been caused by measuring the wrong biases, or perhaps by measuring the right biases in the wrong way.

Another limitation inherent to the research design deals with the solely self-report nature of the questionnaires. Although this limitation could not be overcome because of the strategy that was adopted of sampling multiple organizations, it would be preferable to have obtained more "objective" measures for certain items. For example, measuring actual behavior on the part of permanent workers toward their temporary colleagues would have been preferable. An attempt to overcome this weakness was made by also surveying temporary employees about how their permanent co-workers treat them. This corroborating evidence is helpful, but it does not circumvent many of the problems associated with self-report. Indeed, problems associated with self-report are likely to have emerged throughout a variety of constructs measured in this research. Many of the concepts studied in this dissertation concern issues about which people may be unwilling to disclose their true feelings. For example, it is not socially desirable to show bias toward your temporary co-workers or admit that you exhibit less than
welcoming behavior to your temporary colleagues. Perhaps a better way to conduct this study would be through observations and experiments, yet it would be premature to attempt such a project without at least gathering the sort of support for the proposed ideas that has been obtained in the current research.

**Strengths:** There are four major strengths to the research design employed in the current research. First, the respondent-selection strategy has the inherent advantage of not being organization-specific. That is, by including numerous organizations in the study, the results are more generalizeable. Had only one organization been used, the results would have to be treated with concern for their specificity. It would be possible that something about the context in which the data were collected created results that would not emerge in a different organization (whether it be a different size, different industry, different management style, etc.). In the current study, there was substantial variability in the size of the organization, the percentage of temporary employees employed in the organization, and the type of industries that the various organizations represented. In sum, the data collection strategy allowed for maximum generalizeability.

A second strength of the research design was that supervisors were linked with the permanent and temporary employees. Specifically, the supervisor answered the survey with regard to the temporary and permanent employee that (s)he selected to complete the questionnaires. The temporary and permanent employees, on the other hand, completed their questionnaires with regard to their co-workers more generally. As a consequence, corroborating evidence for the research findings was obtained from a variety of sources (e.g., permanent employees’ behavior was reported by both permanent and temporary employees). Furthermore, issues of social desirability on the part of permanent employees (in that they may be unwilling to self-report feelings or behaviors that might place them in a negative light) were overcome by also asking
temporary employees about the behavior that permanent workers’ exhibit toward them. Nonetheless, this advantage to the data collection strategy also made it more difficult to gather a sufficient sample size. Participation was required at multiple levels, and not surprisingly, the sample size dropped from level to level.

The third strength the current research provides is that there were manipulations embedded in the survey, thereby facilitating inferences about causality. For example, because the labels and associated behaviors were manipulated in the LIB task, causality could be more clearly assessed than is typically possible in questionnaire research. That is, there is no question that bias was being measured by this procedure, rather than idiosyncratic responses to particular materials or scenarios. Relatedly, the fourth strength of the current study was that techniques and concepts were borrowed from social psychology that have yet to be imported to our field (e.g., use of the LIB to assess implicit inter-group bias). Such cross-pollination has the potential to facilitate the understanding of workplace dynamics, given the relevance of social psychological principles to OB and HR. Social psychology deals with many of the same issues, although not applied to organizations, and thus it has the potential to be usefully adaptable to an organizational context. For that matter, organizational research also has the possibility of benefiting social psychology, as ideas and findings from research in applied settings can often facilitate theory development in basic research.

*Future Research Directions*

The findings of the current research suggest that there are various sources of friction between permanent and temporary workers that may counteract the benefits that organizations reap through judicious use of temporary employees. Although a more complete understanding of the dynamics between temporary and permanent workers
was sought, the mixed results call for additional research. This section reviews particular findings from this research, the questions that they suggest, and then ends with suggestions for more general research directions.

**Inter-Group Biases:** The out-group favoritism shown by temporary workers has interesting implications for future group research. Previous work on group biases has not examined a situation such as this, in which group membership is malleable, members in one group desire membership in the other, and a change in group membership could occur at any time. The findings of the current research suggest that this combination of features leads members of the low status group to show out-group favoritism. It is too early to know how generalizeable these results will be, but they suggest exciting possibilities for future research in other domains in which these features might be present (e.g., assignment-based work teams, etc.).

These results suggest that it may also be necessary to examine how individuals define themselves in future group research, as self-definations are likely to influence the kinds of biases shown. For example, in the current research it seems that temporary employees are not endorsing their temporary employee membership. Rather, they seem to be distancing themselves from their group by showing favoritism toward the out-group. This explanation for the finding is obviously speculative, and will need to be corroborated in future research. For example, it is possible that self-perception of group membership had little to do with the out-group favoritism that was shown, but rather it may have been caused by a shared perception that permanent employees are better workers, or are more deserving of bonuses or raises because of their long-term relationship with the organization. The current research does not allow for these different explanations to be tested, but these are issues worthy of future research.

One possible way to examine these ideas would be to ask various permanent and temporary workers how similar they feel to various other employees in their
organization, and how similar these employees are to each other. Multi-dimensional scaling could then be used to see if a “map” of their relationships to other employees could be created. If such a map revealed that they cluster themselves with permanent rather than temporary workers, or that the temporary workers do not form an identifiable cluster, this finding would suggest that temporary workers do not define themselves as a member of the temporary employee group. Furthermore, this technique could be used to differentiate the inter-group attitudes of voluntary vs. involuntary temporary employees, as the former might feel more bonded than the latter to their fellow temporary employees.

**Model:** The fact that relationships emerged between psychological factors such as implicit and explicit bias, organizational factors, and permanent employees’ behavior is an exciting preliminary finding. These relationships provide evidence of the role of psychological factors in mediating the impact of organizational characteristics on individual behavior. Nonetheless, the current research does not allow for a full understanding of the psychological mechanisms that link bias to these factors. By explicating how bias plays a role in this process, we can better understand how changes in the organizational context will affect bias and ultimately behavior. With a more thorough understanding of bias (and other possible mediators), more accurate predictions can be made about how temporary co-workers will affect the behavior of their permanent counterparts. This knowledge will also lead to a better understanding of how organizational factors lead to different behaviors on the part of permanent employees toward their temporary co-workers.

**Threat as a Moderator Between Perceptions and Behavior:** Recall that it was hypothesized and found that threat moderates the relationship between permanent employees’ perceptions of why their temporary colleagues work as such and the behaviors they exhibit toward their temporary colleagues. Among employees who
indicated feeling threatened by the presence of their temporary co-workers, their behavior was more negative when they believed the temporary employees were working as such involuntarily. In contrast, among employees who were not threatened by the presence of their temporary co-workers, their behavior was more positive when they believed that temporary employees were working as such involuntarily. Thus, the presence of threat leads permanent employees to change their otherwise positive impression of involuntary temporary employees (as was seen in the model) to a more negative evaluation. In all likelihood, this change emerged because involuntary temporary employees are perceived as more interested in a permanent job, and thereby are inherently more threatening. Under this circumstance, when one is threatened by the presence of temporary employees, behaving positively toward them is self-defeating as it increases the chance that they will perform well, and perhaps replace the permanent worker. Thus, when employees feel threatened by their temporary colleagues, they would be unlikely to help the very people who might displace them. Interestingly, this moderated effect only emerged when examining the behaviors that temporary employees report that permanent employees exhibit toward them. Nonetheless, the fact that this finding emerged with regard to behavior reported by the temporary employees is important, as common method variance concerns are less applicable.

Although threat did not play as strong a role in the model as was initially thought, this moderated relationship suggests that threat does determine when permanent and temporary employees will get along as a function of the temporary employee’s type (i.e., voluntary or involuntary). This finding is important because it suggests when permanent employees are likely to behave in different ways toward temporary employees. Additionally, this finding is probably not isolated to temporary employee type, as it may replicate for a variety of other relationships. For example, threat might also moderate the relationship between how talented and reliable the temporary
employee is perceived to be and how friendly the permanent employee is toward her. A talented and reliable temporary employee would be preferred by non-threatened permanent employees, but an untalented and unreliable temporary employee may actually be preferred by threatened permanent employees, as they will be less concerned that such an individual will usurp their position. By recognizing the role of threat as a moderator, a more thorough understanding of how temporary employees affect permanent workers can be obtained. This understanding, in turn, may make it easier to provide advice to organizations about the dynamics between temporary and permanent employees. Nonetheless, a more complete understanding of exactly when employees are threatened by the presence of temporary co-workers and when they are not must be ascertained.

The Relationship Between Attitudes and Performance: Recall that a different pattern of results emerged between the attitudinal variables and supervisor-rated performance for temporary and permanent employees. For permanent employees, as affective commitment increased so too did performance, while an increase in continuance commitment was associated with lower performance. A relationship also emerged between job satisfaction and performance for permanent employees such that more satisfied employees also had higher performance ratings from their supervisors. For temporary employees, the supervisors’ ratings of performance were not related to any of these variables.

It is exciting to find supervisors’ performance ratings to be related to permanent employees’ attitudes, as this relationship is typically difficult to uncover. There are so many influences on performance that are outside of the employee’s control that it is not surprising that this relationship is often not found. One possibility for why the relationship emerged in the current study has to do with the kind of performance that was being assessed. It would have been difficult to use “objective” indicators of
performance in the current research because of the large number of organizations that were being studied. Consequently, the performance items that were asked of the supervisor were aspects of performance that are largely in the control of the permanent employee (e.g., attendance). With these sorts of performance variables, an attitude/performance relationship may be more readily found.

It is also potentially important that differences emerged in the predictive ability of temporary and permanent employees' job attitudes. The fact that performance was related to satisfaction and commitment among permanent but not temporary employees suggests that measures of satisfaction and commitment are differentially relevant for these two populations. Indeed, this finding highlights the possibility that new measures of these constructs may be necessary among temporary employees, as perhaps satisfaction and commitment simply mean different things to temporary employees, and thus the underlying relationship with performance was simply not properly tested. It is also possible that issues of satisfaction and commitment are not as meaningful to temporary employees, as their relationship with the organization differs from that of permanent workers for whom these scales were conceived and developed.

Another possibility is that satisfaction and commitment are meaningful variables for temporary employees, but are not as predictive of their performance. If employees are working involuntarily as temporary employees, there may be a variety of reasons why their attitudes would not predict their performance. For example, they may be somewhat dissatisfied with their temporary role and duties, but because they are hoping to gain a permanent job through their temporary one, may still be performing to their highest capabilities. Additionally, they may perceive that the job could be quite satisfying if they were a permanent worker, and thus could be working hard to gain
something that they are convinced is satisfying, but currently do not have. As a consequence, there may be no meaningful relationship between attitudes and performance.

A final possibility is that the accuracy of supervisors' ratings of temporary workers' performance may be lower. Supervisors' contact with the temporary employees in the unit is likely to be limited by virtue of the shorter time period the temporary employee has been with the organization. As such, more error variance would be associated with their ratings of temporary employee's performance, which would cause a true relationship to go unnoticed.

**Temp to Perm:** Given all the biases and inter-relationships between temporary and permanent workers noted above, it would be of interest to examine the transition of temporary workers who become permanently employed at the organization where they were originally working in a temporary capacity. For example, how does the status of the temporary employee change? Will the permanent workers continue to see and treat the new member of the organization as a temporary employee? Will relations be facilitated or hampered by hiring the temporary worker as opposed to hiring an outsider? One might expect certain variables from the current research to affect the nature of these relationships (e.g., degree of bias previously shown). Because many organizations are relying on temporary employment as a job-screening procedure, it is important to understand how moving from temp to perm affects the organizational members.

One possibility is that permanent employees who had been temporary employees would be the most biased against their temporary co-workers. These newcomers to permanent employment might find it the most important to demonstrate that they are bonafide members of the permanent workforce, and thus they would show an increased need to differentiate themselves from their erstwhile colleagues (see Levine &
Moreland, 1990). By behaving more negatively than other permanent employees toward temporary employees these newly temp to perms can distance themselves from their previous group membership. Again, this relationship will likely vary depending on factors such as the employment situation and the individuals involved.

Conclusion

The three general goals of this dissertation were: to explore under what conditions a blended workforce is likely to lead to negative outcomes; why these conditions lead to negative outcomes; and how these conditions exert their impact. The results suggest that the conditions that cause a blended workforce to produce negative outcomes occur when the perceived motives for using temporary employees are deemed inappropriate, the layoff policy is unfavorable, and/or the relative rank of the temporary worker is equal to or greater than that of the permanent employee. The results suggest that the reason why these conditions lead to negative outcomes is that the permanent workers feel threatened by their temporary colleagues under these circumstances. Finally, in answer to how these conditions lead to negative outcomes, the results suggest that threat is exerting an impact on attitudes and behavior through the biases that permanent workers exhibit toward their temporary co-workers. Thus, the current research provides support for a model in which organizational factors lead to perceptions of threat, which in turn leads to inter-group biases on the part of permanent employees, which in turn causes them to think and act negatively toward their temporary co-workers. It remains for future research to determine how to interrupt this downward spiral, and thereby allow organizations to reap the full benefits of a blended workforce.
## APPENDIX

### MEANS AND STANDARD DEVIATIONS OF PRIMARY VARIABLES

#### Supervisor Responses:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td># of employees in organization</td>
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<td># of temps in organization</td>
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<td>OCBs--perms</td>
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<tr>
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<tr>
<td>OCBs--temps</td>
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<td>.74</td>
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#### Permanent Employee Responses:

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<tr>
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<tr>
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<tr>
<td>intention to turnover</td>
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<tr>
<td>perceived motives</td>
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<tr>
<td>perceived layoff policy</td>
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<td>perceived threat of temps</td>
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Temporary Employee Responses:

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