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GROUP PSYCHOLOGICAL CONTRACTS, BREACH, AND OUTCOMES

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MICHAEL F. PRICE COLLEGE OF BUSINESS

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ABSTRACT

For nearly two decades, researchers have often turned to the psychological contract as a framework for examining employer-employee relations. During this time, they have largely focused on examining the perceived obligations of employers to employees and the consequences of psychological contract breach (i.e., instances in which employees feel like the employer has failed to live up to its obligations). In this dissertation, I intend to integrate coworkers into the framework of reciprocal obligations and to introduce a new construct—namely, the “group psychological contract.” To do this, I develop a model outlining the antecedents of the group-level psychological contract. The model also considers both the group- and individual-level outcomes of group psychological contract breach.

Specifically, this model identifies two key antecedents of group psychological contracts: human resource practices (e.g., recruitment, performance appraisal, socialization, and information given to the employee) and group composition (e.g., size, tenure in the group, demographic differences, personality trait diversity, and individualism/collectivism level of the group). Then, drawing upon relative deprivation theory, the model addresses the feelings of fraternal deprivation which result from breach of the group psychological contract. Next, the consequences of fraternal deprivation (e.g., cohesiveness, group conflict, and citizenship behaviors) are discussed.

In addition to these group-level outcomes, the model also describes the influence of group psychological contract breach on individual psychological contract breach. First, this research investigates how group psychological contract breach contributes to feelings of breach at the individual level. Then, the role of individual

perceptions of group contract breach as a moderator of the relationship between group and individual psychological contract breaches is considered; specifically, the proposed model predicts that greater individual perceptions of group contract breach will increase the likelihood that group members who experience breaches in the group psychological contract will also experience individual psychological contract breaches. Further, when employees experience individual contract breach, the model proposes that employees will experience egoistic deprivation, which will result in certain individual-level consequences (e.g., citizenship behaviors, job stress, voice behavior, and dysfunctional group behaviors). Finally, I discuss the implications of this study and directions for future research.

CHAPTER 1 INTRODUCTION

For nearly two decades, researchers have used the psychological contract as a framework for examining the employment relationship (e.g. Ho, 2005; Ng & Feldman, 2008; Payne, Culbertson, Boswell, & Barger, 2008; Robinson & Morrison, 2000; Turnley, Bolino, Lester, & Bloodgood, 2003). The psychological contract consists of the beliefs that employees hold about their obligations towards their employer and about their employer's obligations towards them (Rousseau, 1989). This set of beliefs may include expectations about an exchange of compensation for hours worked, as well as other more complex exchanges such as the loyalty of an employee to the organization in exchange for job security. Because the psychological contract is based upon an individual employee's beliefs about his or her obligations (Robinson, 1996), it is somewhat idiosyncratic in nature. As a result, workers' psychological contracts may include different promises and obligations than those that the organization, and its agents, believe to exist (Morrison & Robinson, 1997). Consequently, most research has used the framework of the psychological contract primarily to examine the employee's view of the employment relationship (for exceptions, see Lester, Turnley, Bloodgood, and Bolino [2002] and Yan, Zhu, and Hall [2002]).

Many different forces can influence an employee's beliefs about the reciprocal obligations that make up the psychological contract. For example, the evolution of career forms, from traditional careers to boundaryless and protean careers (Arthur & Rousseau, 1996), may influence workers' perceptions about what they believe to be part of the psychological contract. Additionally, the notion of lifetime employment (Ho, 2005), or the idea that if an employee does what is best for the organization, the

organization will do what is best for the employee (Whyte, 1956), is outdated. Other changes in the employment environment have influenced the content of psychological contracts as well. For instance, as unionization declines, the number of employees who are under formal contracts declines as well (Rousseau, 1990), and as employee mobility increases (Sullivan, 1999), employers are placed under greater pressure to successfully live up to their obligations and fulfill employees' psychological contracts.

This is often a difficult task for organizations because psychological contracts are made up of both expressed and implied promises, along with individual employee beliefs about what the employer is obligated to do (Rousseau, 1990). Indeed, an individual's view of his or her personal contract is subject to not only what the employer states, but also to what that employee sees around him or her. Thus, employees who see their coworkers receiving rewards for certain behaviors may then perceive such rewards to be part of their contracts (in exchange for the same type of behavior). To avoid these sorts of complications, organizations may try to develop similar contracts with the majority of their employees (Ho, 2005). Therefore, individuals in the same organization are likely to have similar psychological contracts because the organization is striving to make equivalent contracts with each of its employees.

Nevertheless, there may still be differences between the employees' psychological contracts within the same organization. These differences constitute the *i-deal* portion of a psychological contract. I-deals are idiosyncratic deals that are "voluntary, personalized agreements of a nonstandard nature negotiated between individual employees and their employers regarding terms that benefit each party"

(Rousseau, Ho, & Greenberg, 2006, p. 978). The i-deal portion of a psychological contract occurs because of the different information, interactions, or experiences that employees encounter within the workplace. These different experiences lead employees to develop individual beliefs about the obligations that exist between them and their employers (Rousseau, 1995; Rousseau et al., 2006). However, it is important to note that the shared experiences of employees would tend to produce psychological contracts that have similar terms.

Because of the collaborative nature of organizations, employees are often a part of a group within the organization. For instance, they may belong to departments, work groups, special project teams, or other similar collaborative units. This proximity of workers to one another creates the possibility that group members, as a collective, may perceive that promises and obligations exist between the group and the organization. Ho (2005) suggests that along with the formal actions of organizations, social forces such as informal socialization processes and coworker interactions might influence an individual's perceptions of the psychological contract. Given that many employees in organizations spend a significant amount of time working with one another in the context of a group, it is likely that group members will develop perceptions about what the organization owes to the group and what group members believe that they, as a group, owe to the organization. In other words, group members are likely to develop a shared, group psychological contract. By exploring the group psychological contract, this dissertation seeks to advance prior theoretical and empirical work on the psychological contract in four important ways.

The first contribution of this research is the development of a new construct—namely, the group psychological contract. Whereas previous research has focused on the psychological contract at the individual level, this paper seeks to establish the existence of the psychological contract at the group level. Prior work has focused on the psychological contract in the context of the reciprocal relationship between an employee and the organization (e.g. Robinson, 1996; Rousseau, 1989; Turnley & Feldman, 1999); expanding upon this work, I suggest that groups within organizations often develop expectations about the reciprocal obligations between them and their organization. For instance, a work group may develop expectations about rewards that it should receive if the group reaches certain goals. Each member of the group perceives that the organization has made a promise of some type of reward in exchange for a specific level of group performance; this would comprise one element of the group psychological contract. Thus, the group psychological contract is composed of individual group members' beliefs about the obligations of the organization to the group, based upon the fulfillment of the group's obligations to the organization. In this way, the referent for the contract shifts from the individual level, where it has been traditionally addressed, to the group level.

Second, I identify two broad categories of antecedents of the group contract. Prior work in the psychological contracts literature has discussed the possibility that certain organizational practices may influence the development of the psychological contract (Rousseau & Greller, 1994); however, there has been very little, if any, empirical work testing these propositions. While some prior work has examined the development of the psychological contract at organizational entry (see also De Vos, Buyens, & Schalk,

2003; Payne et al., 2008; Thomas & Anderson, 1998), no studies have focused on the range of human resource management practices Rousseau and Greller (1994) described as potential antecedents. Therefore, this study not only identifies and tests some of the potential antecedents of psychological contract development, identified by prior researchers, but it also extends this work by examining them in the context of the group psychological contract. Drawing from the work by Rousseau and Greller (1994) and using social information processing theory (Salancik & Pfeffer, 1978), I derive two main categories of antecedents that influence the development of the group psychological contract, and I then examine their influence on agreement about the group psychological contract.

The first category of antecedents I consider in the development of the group psychological contract is human resource management (HRM) practices. Prior research suggests that HRM practices may influence psychological contracts (Rousseau & Greller, 1994). Specifically, the practices used in recruiting, training, appraising, and compensating employees are all likely to contribute the type and content of the contract that group members perceive the group has with its organization. Employees experience the influence of HRM practices through their interactions with organizational agents, their observation of other employees' behaviors and rewards, and the processes and procedures of the organization. Two qualitative studies (Dick, 2006; Pate, 2005) have suggested that the HRM practices of an organization can have an influence on employees' psychological contracts. Building on this small amount of both theoretical and empirical work, I consider the ways in which recruiting, performance appraisals,

socialization practices, and organizational information communicated through documents may influence the creation of the group psychological contract.

The second category of antecedents that I consider is group composition, or the nature and attributes of the group members (Kozlowski & Bell, 2003). Research has suggested that coworkers and others around an employee can influence psychological contracts. This work suggests “social referents” can have an influence on workers’ perceptions of their psychological contract fulfillment (Ho, 2005; Ho & Levesque, 2005) and contract breach (Zagenczyk, Gibney, Kiewitz, & Restubog, 2009). Building on this work, which suggests that others may have an influence on employees’ psychological contracts, I seek to understand if entire groups of employees share a psychological contract—that is, if a collection of individuals agree about what is and is not part of their collective contract with the organization. Specifically, in this dissertation, I focus on the following group composition variables: size of the group, tenure in the group, demographic differences of group members, personality traits of group members, and individualism/collectivism level of the group. Whereas the HRM practices of an organization shape the group members’ perceptions of what they believe are the mutual obligations of the group psychological contract, a group’s composition provides the context (Kozlowski & Bell, 2003) for the formation of the group contract.

The third contribution of the study is that it examines the group-level outcomes that result from group psychological contract breach. We already know much about the individual-level consequences of psychological contract breach from prior work (see Zhao, Wayne, Glibkowski, & Bravo, 2007). Individual psychological contract breach has been linked to higher turnover intentions (Turnley & Feldman, 1999), lower levels

of both in-role performance and organizational citizenship behaviors (OCBs) (Turnley et al., 2003), and negative job attitudes (Tekleab, Takeuchi, & Taylor, 2005; Zhao et al., 2007). In contrast to previous research, this dissertation will look at the responses of groups to the breach of their group psychological contract. Moreover, it is expected that breach of a group psychological contract will be associated with group-specific outcomes, as the group reacts to the unfulfilled contract. Specifically, drawing from relative deprivation theory (Martin, 1981), I expect fraternal deprivation to be associated with the following outcomes: cohesiveness, group conflict, and citizenship behaviors toward group members.

The fourth and final contribution I seek to make in this dissertation is to provide a better understanding of how group psychological contract breach contributes to individual psychological contract breach and of how individual perceptions of group contract breach influences this relationship. Specifically, I predict that when group psychological contract breach occurs, individuals are more likely to feel that their individual contract has been breached as well. However, individual perceptions of group contract breach is expected to play an important role in this relationship. Because the group contract is based on group members' beliefs about the promises and obligations that exist between the group and the organization, it is anticipated that there will be some differences among members of the group in what each individual perceives to be part of the group's psychological contract. Thus, an individual's perception of group contract breach is likely to influence the relationship between breach of the group contract and breach of the group members' personal (i.e., individual) psychological contracts. Specifically, when individuals do not perceive the group's

contract has breached, it is less likely that individual members will perceive breach in their own psychological contracts. Conversely, when employees perceive that the group psychological contract has been breached, they should be more likely to perceive that their individual contract has been breached as well. Thus, individual perceptions of group psychological contract breach has important implications for employees' perceptions of the fulfillment or breach of their own psychological contracts.

Overall, then, this dissertation introduces the group psychological contract, examines its potential antecedents, explores some of the outcomes of psychological contract breach at both the group and individual level, investigates the role of group-contract breach as an antecedent to individual psychological contract breach, and looks at how individual perceptions of group contract breach influences the relationship between group psychological contract breach and individual psychological contract breach.

Employee's View of the Employment Relationship

In the following section, I introduce the theory for this dissertation. I begin with a brief review of the constructs of the individual psychological contract and psychological contract breach. Next, I introduce the group psychological contract. Following this, I explore the development of the group psychological contract, breach of the group contract, and outcomes of group psychological contract breach. Finally, I consider the effects of group psychological contract breach on individual psychological contract breach and some of the outcomes of individual psychological contract breach.

The Psychological Contract

Early work (Argyris, 1960; Levinson, Price, Munden, Mandl, & Solley, 1962; Schein, 1980) on the employment relationship suggested that both workers and the organization hold certain beliefs about the mutual obligations that exist between them. Building upon this work, Kotter (1973) further described these expectations and promises about potential exchanges in the employment relationship as the psychological contract. During the past two decades, the psychological contract has received significant research attention from scholars as a framework for better understanding the employment relationship (Zhao et al., 2007). Renewed attention in psychological contracts is attributable to Rousseau's (1989) re-conceptualization of the construct. Whereas prior work had emphasized the mutual obligations between the employee and the employer, Rousseau's (1989) reframing of the psychological contract focuses more on the individual and his or her beliefs about the employment relationship. Like most of the recent research in this dissertation, I derive my conceptualization of the psychological contract from the one presented in Rousseau's (1989) seminal work.

The psychological contract is defined as the "individual beliefs, shaped by the organization, regarding terms of an exchange agreement between individuals and their organization" (Rousseau, 1995, p. 9). This contract is composed of the obligations that an employee feels he or she owes his or her employer and the promises and obligations that the employee feels the employer owes to him or her. The beliefs of these workers stem from the explicit or implicit promises made by an employer (Robinson, 1996) and from personal beliefs about what an organization is obligated to do for them (Rousseau, 1995). The organization, while it fulfills a key role in the psychological contract, does

not have a psychological contract with the employee.¹ It simply provides the context in which the contract exists (Guzzo, Noonan, & Elron, 1994; Rousseau, 1989). These views of the employment relationship form a schema or a cognitive structure based on the information an individual has about a specific person or situation (Fiske & Taylor, 1984). Rousseau (2001) proposed that the psychological contract becomes a “schemata, which like most other schemas, is relatively stable and durable” (p. 512). Schemas influence the way that people interpret and react to the world around them (Fiske & Taylor, 1984). Thus, the processing of this information about promised obligations and contributions through a psychological contract schema has important implications for the employment relationship.

The perceptions of workers are the main contributor to psychological contracts. Thus, when individuals perceive that their contributions result in obligations for the organization, the psychological contract has developed (Rousseau, 1989). In most cases, the psychological contract is composed of promises about what the organization will provide workers in exchange for the workers’ services (Ho, 2005). Explicit promises, which may be contained in a legally binding contract as well as the psychological contract, are easy to understand for both parties (Rousseau & Parks, 1993). However, discerning everything that contributes to the psychological contract is not so easy. Many implicit promises are also part of the psychological contract, along with the employees’ beliefs about an organization’s obligations (Robinson, Kraatz, & Rousseau, 1994).

¹ It is important to note that some researchers have suggested that organizational agents and organizations themselves can have a psychological contract with the employee. This work indicates that the organization has beliefs about the reciprocal obligations between the two parties. Lester et al. (2002) suggested that supervisors do have beliefs about the obligations between an employee and his or her organization. Additionally, results from Yan et al. (2002) indicated that the organization itself pursues certain courses of action with the intent of developing a specific type of psychological contract with its employees.

These promises and beliefs create perceptions about the types of exchanges that will occur in the future (Farnsworth, 1982); furthermore, the perception of these promises between the two parties will typically lead individuals to fulfill their obligations when they expect the organization will fulfill its obligations (Farnsworth, 1982). In this way, then, the psychological contract can have a powerful influence on employee behavior.

Although beliefs about the psychological contract are unilateral (Rousseau, 1990), it is still important for an organization to be aware of and strive to fulfill all of the obligations that are part of employees' psychological contracts. Indeed, as noted earlier, psychological contract fulfillment is associated with numerous positive outcomes, such as higher levels of job satisfaction (Rousseau & Shperling, 2003), increased acts of OCB (Turnley et al., 2003), and better job performance (Lester et al., 2002); thus, the more successful an organization is at fulfilling psychological contracts, the greater level of positive outcomes it can expect. Because of the mutually beneficial outcomes of psychological contract fulfillment, many employees assume that the organization will deal with them in good faith with regard to their contracts (Rousseau, 1989).

Furthermore, exchanges over time create trust and predictability, and they provide a foundation for continued positive interactions between the two parties (Rousseau & Parks, 1993). Thus, the contract is part of the larger relationship between the employee and the employer (Rousseau, 1989), and its fulfillment creates a positive context for this relationship. However, fulfillment of the contract also depends on the way that individuals interpret their contract (Rousseau & Parks, 1993). For this reason, an organization can treat two different employees in a very similar way and yet those

two employees may have different perceptions about the degree to which the organization has lived up to its promises (i.e., fulfilled the psychological contract). In addition, organizations may treat employees differently, even those in the same workgroup, and still those employees can have the same perception about the fulfillment of their psychological contract.

There are two general types of contracts that exist between employees and their employer: transactional contracts and relational contracts. These two types of contracts are often conceptualized as the opposite ends of a single continuum² (Rousseau & Parks, 1993). At one end, there is the transactional contract, which is narrowly focused, has a specific timeframe, is static, and can be easily observed. This type of contract is also described as “project based” (Yan et al., 2002, p. 376). At the other end of the continuum is the relational contract, which is very broad, open-ended, dynamic, and understood rather than observed (Morrison & Robinson, 1997; Raja, Johns, & Ntalianis, 2004; Rousseau & Parks, 1993). In addition, relational contracts take longer to develop and are characterized by personal relationships (Rousseau & Parks, 1993) and a focus on loyalty; indeed, both parties expect it to be a long-term relationship (Yan et al., 2002).

A transactional contract may serve as a precursor to a longer term, or more relational type of contract (Rousseau & Parks, 1993). The location of these contracts on a single continuum has received some empirical support. For instance, Rousseau (1990) found that these two types of contracts accurately characterize the way that many new recruits view their relationship with the organization (i.e., as either transactions or

² It is important to note that some researchers have treated contract types as separate dimensions or continua (for examples see Raja et al., 2004; Turnley et al., 2003).

relationships). These two types of contracts have been conceptualized as the two ends of a single continuum. As a result, contracts can be more or less transactional and relational, depending on where they are located on this continuum. Rousseau (2000) described contracts with elements of both transactional and relational contract types as “balanced” or “transitional” contracts.

Breach of the Psychological Contract

Much of the empirical work on psychological contracts has focused on what occurs when the contract is breached or not fulfilled (Zhao et al., 2007). *Breach* occurs when an employee fulfills his or her obligations and then recognizes that the organization is not fulfilling the corresponding obligations. *Violation*, a feeling of anger and frustration, often follows a psychological contract breach (Morrison & Robinson, 1997). Whereas much of the early research on psychological contracts used these two terms interchangeably, recent work treats psychological contract violation as an emotional or affective reaction to instances of psychological contract breach.³ Thus, workers move through a process of breach and violation as they realize and then react to an unfulfilled contract (Morrison & Robinson, 1997).

³ Violation describes the feelings of anger, betrayal, distress, or wrongful harm that follow perceptions of breach. Violation is most likely to occur when employees perceive that a high-value promise has gone unfulfilled (Morrison & Robinson, 1997). It is important to note that breach represents the cognition about a broken contract, while violation is the affective or emotional reaction to that breach (Morrison & Robinson, 1997; Thompson & Bunderson, 2003). Thus, violation is a deep emotional response that indicates an employee blames the organization for not fulfilling a promise. It should also be noted that while violation does follow breach, not all breaches result in violations (Morrison & Robinson, 1997; Thompson & Bunderson, 2003). The more serious the perceived breach is, the more intense the feelings of violation are likely to be (Raja et al., 2004). Feelings of violation often lead workers to feel that they do not need to fulfill their own obligations to the organization. As a result, violations may contribute to a breakdown in trust between workers and the organization (Robinson et al., 1994).

Depending on the type of contract an employee holds—transactional, relational, or balanced—there are many different things an organization may or may not do that can result in unfulfilled contracts. For instance, a promised cost of living adjustment that is not fulfilled, or the loss of flextime, could cause a breach of the psychological contract. Generally speaking, the basic process of contract breach and violation follows the same pattern, regardless of the type or content of an employee’s psychological contract. While the full process is rather complicated (see Morrison & Robinson, 1997), the basic progress begins when individuals first perceive an unfulfilled promise. Then, a comparison occurs that results in the decision about whether or not the unmet promise constitutes a breach of the psychological contract. Finally, if it is determined that breach has occurred, the worker must interpret this breach, and then decide if it is a violation of the contract (Morrison & Robinson, 1997).

The process of psychological contract breach begins when something occurs that causes the employee to perceive that the organization is not living up to its promises or commitments with regard to the obligations that make up the employment relationship (Morrison & Robinson, 1997). The perception of breach signals that employees are paying attention to and monitoring how well the organization is fulfilling their psychological contracts (Raja et al., 2004). It is possible that promises to the employee can be unfulfilled, but not be perceived as psychological contract breach. This can occur if the employee does not notice that the promise was unfulfilled, or they do not feel that the unmet promise creates an imbalance in contributions (Morrison & Robinson, 1997). Based on the notion that unmet promises may not always result in breach, some researchers suggest that there is value in taking steps to increase the ability of each

party to better understand and renegotiate the employee's psychological contract when needed (Rousseau & Shperling, 2003).

There are two potential reasons for breach to occur—incongruence and renegeing. Incongruence happens when the perceptions of the two parties about what is in the contract are different. This may happen because of the inherent complexity of the psychological contract. It is also possible for there to be divergent views about the requirements for fulfilling the obligations of the contract, because of communication problems (Morrison & Robinson, 1997). In contrast, renegeing occurs when there is either an inability or unwillingness on the part of the organization to fulfill current promises. In other words, the contract is broken because the organization is unable or unwilling to fulfill prior promises and current obligations. In cases of renegeing, then, there is no confusion about the content of the contract. Thus, renegeing differs from incongruence because in cases of renegeing each party has an understanding of the promises and obligations (Morrison & Robinson, 1997). Empirical findings have linked breach to negative outcomes for both for individuals and organizations. Findings indicate that perceptions of breach have a positive relationship with feelings of violation (Raja et al., 2004) and a negative relationship with trust (George, 2003; Robinson et al., 1994). A recent meta-analysis of 51 studies (Zhao et al., 2007) found that psychological contract breach is positively related to turnover intentions and negatively related to job satisfaction, organizational commitment, OCBs, and in-role performance. Additionally, other findings demonstrate a positive relationship between breach and intentions to quit (Robinson, 1996; Robinson & Morrison, 1995a; Robinson et al., 1994; Turnley & Feldman, 2000).

Because not all breaches result in violations (Morrison & Robinson, 1997; Thompson & Bunderson, 2003), it is possible that there is a difference in the magnitude of employee reactions to each of these states. In particular, breach may lead to frustration and disappointment; however, violation creates feelings of anger and outrage (Rousseau, 1989). Although the magnitude of worker responses to each may differ, previous research suggests (as outlined above) that both breach and violation result in many detrimental consequences for both employees and employers. Because violation is a reaction to breach (Morrison & Robinson, 1997) and the two are highly correlated, meta-analytic results suggest a 0.52 correlation between the two variables (Zhao et al., 2007), and for reasons of parsimony, the relationship between the group psychological contract breach and violation is not explored in my dissertation.

We Work Together: The Psychological Contract and Groups

The employment relationship has been undergoing change in recent decades (Cascio, 1995; Sullivan, 1999). There has been a move away from the organizational career towards the idea of self-directed careers, which means that workers are more responsible for their own skills and careers (Fugate, Kinicki, & Ashforth, 2004; Sullivan, 1999). As a result, workers have also become more mobile and less attached to their organizations. During this period, organizations have changed structurally through downsizing, outsourcing, and the decline of unionization. These types of changes have also altered the way that individuals view the employment relationship (Rousseau, 1990; Zhao et al., 2007). Gone is the time when employees exchanged loyalty to the organization for security in their jobs. Today, employees are responsible for increasing their own employability and maintaining the ability to move from job to

job (Cooper, 1999; Ho, 2005; Sullivan, 1999). Indeed, the type of career an individual may now expect is dramatically different from the one they might have expected only a few decades ago (Arthur & Rousseau, 1996), and these structural changes in careers have resulted in changes to the psychological contract (Rousseau, 1990).

Another way in which organizational life has changed is an increased reliance on groups and teams to accomplish critical tasks. The use of groups and teams to meet competitive challenges has expanded at a dramatic rate since the mid-nineties (Cohen & Bailey, 1997). There are many different types of groups and teams within an organization. In particular, teams have been classified into categories such as production, service, management, project, and so forth (Kozlowski & Bell, 2003). In addition to these newer formal teams, there are also many informal groups that have always existed in the workplace—lunch groups, subparts of departments, cliques, and other informal associations among the members of an organization (Schein, 1980). As such, groups have now become a staple of organizational life, and employees are likely to spend a large portion of their time in a group setting. For many employers, then, the most important skill a new recruit can possess is the ability to work in a team (Cohen & Bailey, 1997).

Because of the increasing use of teams in contemporary organizations, groups are now the social context in which many psychological phenomena occur (Levine & Moreland, 1990). The social learning perspective (Bandura, 1977) suggests that people learn from others in their work environment. Consistent with this view, research indicates that employees learn a variety of acceptable (e.g., George & Bettenhausen, 1990) and unacceptable (e.g., Robinson & O’Leary-Kelly, 1998) behaviors from their

coworkers. Workers may also learn about things besides behaviors. Indeed, the vast literature of social psychology clearly shows that social influence occurs across a wide range of perceptions, attitudes, and beliefs (Zimbardo & Leippe, 1991). Specifically, there is research that suggests social influence affects how employees see their jobs and organizations, in addition to how they feel about them (e.g. Burkhardt, 1994; Ibarra & Andrews, 1993; Salancik & Pfeffer, 1978).

The ubiquity of social influence in organizations makes it reasonable to expect that employees will learn about the different promises and obligations that comprise their coworkers' psychological contracts. Further, individuals may compare their own contract with coworkers' contracts or be conscious of the way that the organization fulfills their peers' contracts (Ho, 2005). Coworkers may also play another important role in the context of social influence. Employees may use members of their groups as referents when evaluating their own individual psychological contracts, watching to see what types of promises and obligations their fellow group members have with the organization, and then comparing these to their own contracts. This process of comparison may help workers determine if the organization is fulfilling their contract in a similar manner to their coworkers. Further, people may make such comparisons so they know if they should modify their own behavior (Ho, 2005; Salancik & Pfeffer, 1978). As such, groups of coworkers are likely to influence the content of each other's contracts and judgments about the degree to which the organization is fulfilling those contracts (Ho, 2005).

In addition to influencing judgments about the nature, content, or fulfillment of the psychological contract, the group setting may influence the psychological contract

in at least one other critical way. Specifically, because people spend so much time in work groups, there is potential for a group psychological contract to develop. That is, as individuals spend more time around group members and feel more comfortable with the group, there is a possibility that shared expectations will form about what the group owes to the organization and what the organization owes to the group. Indeed, given that organizations often strive to provide a common set of promised benefits and compensation to all (or most) organizational members (Ho, 2005), it seems very likely that many group members will perceive the obligations of the organization in a common fashion.

In a manner that is analogous to the way individual psychological contracts form, around expectations related to benefits and resources being exchanged for services (Rousseau, 1995; Rousseau & Parks, 1993), a group, as a collective, may begin to develop expectations about its exchange relationship with the organization. Thus, collectively, the group, will develop beliefs about the promises that the organization has made to the group and what obligations the group has to the organization. For example, the group contract may specify the expectations a group has about the rewards it will receive if certain objectives are accomplished, such as if a job is completed early, the group will receive a bonus. Therefore, I suggest that group-level psychological contracts can form among groups of employees. More specifically, I define the group psychological contract as follows:

The group psychological contract consists of the perceived reciprocal obligations that a group of employees believes exists between the group and the employer. The group-level contract is made up of the perceptions about what the group believes that the organization owes the group and what group members believe they, as a group, owe the organization in return.

The makeup of the group contract is contingent upon two factors: (1) the existence of a group and (2) agreement among group members about what is part of the contract. First, it is essential that a group is composed of at least two employees for a group contract to form. However, even when a group has formed it could be difficult for a group psychological contract to form because the organization may manage its human resources in a very unsystematic or haphazard manner. Indeed, if the policies and procedures directing the organization's interactions with its employees are highly variable, it is more likely that employees will develop idiosyncratic deals. Idiosyncratic deals are unique, individualized terms of employment negotiated between a worker and his or her employer (Rousseau et al., 2006). In organizations that have many employees working in similar jobs, separate departments, or groups working in geographically separated workplaces (e.g., a bank branch), there is a greater possibility for group psychological contracts to form, than in an organization where all of the employees have very different jobs and work within a single unit. Additionally, a larger organization is more likely to have standardized practices and processes that create similar promises for each employee (and the groups thereof), and this should contribute to the formation of group psychological contracts.

Because the group psychological contract is composed of the perceptions of each group member, there is a possibility that members will have different beliefs about what obligations are part of the contract. The more similar the individual psychological contracts that employees have with the organization, the more likely they are to view the obligations of the group psychological contract in the same way. Group psychological contract agreement—the agreement about the perceived reciprocal

obligations among group members—has implications for the existence and outcomes of the group psychological contract. Additionally, individual perceptions of group psychological contract breach have implications for the relationship between the group-level and individual-level psychological contracts of an employee. As described in chapter 2, the relationship is predicted to be weaker when individuals do not perceive that the group psychological contract has been breached.

Why Study It and Is It New? The Importance of the Group Psychological Contract

In this section, I will focus on the reasons for developing this new construct. I will first discuss theoretical guidelines for developing a collective construct. To do this, I will draw from Morgeson and Hofmann's (1999) article about structural and functional criteria at the group level. Second, I will examine the group psychological contract in the context of other group-level constructs, with the intention of demonstrating how it differs from other group-level constructs in the nomological network.

As organizational scientists have pushed the boundaries of what is known about employee attitudes and behaviors in the workplace, many different theories of human behavior have been proposed and constructs have been developed. As our knowledge has expanded, many researchers have taken individual-level theories and constructs and applied them at the group and organizational level. Organizational learning (Argyris & Schön, 1978) and collective memories (Walsh & Ungson, 1991) are examples of individual constructs applied at a different level of analysis. Construct proliferation is a potential danger that exists when individual constructs are simply moved to different levels. To guard against this, Morgeson and Hofmann (1999) suggest that researchers

who seek to introduce multilevel constructs must consider both the structure and function of the collective construct to ensure that this construct truly exists at a higher level.

Collective action provides the basis for the structural portion of a collective construct. Collectives should be examined as “systems of interaction” (Giddens, 1993, p. 128), because it is the interaction between members of a group that leads to actions by the group as a whole (Morgeson & Hofmann, 1999). Interactions between group members build a collective structure, and this structure persists because members of the group continue to act in a way that transmits this structure over time. Thus, we see that the individuals in a group determine the collective construct through their actions because these actions influence the behavior of others in the group (Morgeson & Hofmann, 1999). If an interaction occurs among group members, which creates structure, this suggests that there is support to study this construct at the group level.

The function of a collective construct refers to the products or the outcomes of that construct (Morgeson & Hofmann, 1999). Functions provide a clear way for researchers to link constructs across levels, because functions typically remain constant across levels and, as such, are comparable. Simply put, if a construct has the same function at a different level of analysis, it makes sense to consider the construct in a multilevel way (Morgeson & Hofmann, 1999). Further, the construct is meaningful if the functions at the group level are meaningful in some way (Li & Cropanzano, 2009). Thus, if the outcomes of a group-level construct are similar to the outcomes of the same construct at the individual level, and are important at the group level, researchers should study this construct at the collective level.

By considering both the structure and function of a multilevel construct, we are able to determine if it is truly multilevel. When considering the group psychological contract, I propose that it meets both the structural and functional criteria. First, there is an interaction between group members that focuses on the mutual obligations of the contract; this interaction is necessary for the group psychological contract to exist. Second, for the group psychological contract to exist, group members must agree upon the various promises and obligations that both the group and the organization have to one another. Agreement about what comprises the group psychological contract will influence the behavior of individuals within the group, which in turn reinforces the structure of the construct.

In addition to this multilevel structure, I suggest that there are specific functions of the group psychological contract. These functions are similar to the detrimental effects of individual contract breach described earlier. If breach of the group psychological contract is also associated with a number of negative outcomes associated, it would be important for organizations to do their best to fulfill the group's psychological contract. Moreover, as outlined later, I believe that breach of the group psychological contract will also have a direct impact on individual-level psychological contract breach. Therefore, I recommend studying the group psychological contract because it meets both the structural and functional criteria suggested for multilevel theory (Morgeson & Hofmann, 1999).

While the structure and function criteria suggest that the group psychological contract may exist, there are a few other constructs in the field of organizational behavior that also focus on the relationship between of employees and their

organization (Pierce, Kostova, & Dirks, 2001) like the group psychological contract does. Thus, it is important to consider if the group psychological contract is sufficiently new and distinct from existing constructs. All except one (justice climate) of the currently existing constructs focus on the relationship between employees and their organization at the individual level (Pierce et al., 2001); thus, I focus on distinguishing the group psychological contract from other group-level constructs. Most constructs at the group level focus on characteristics of the group, such as group potency (Lester, Meglino, & Korsgaard, 2002), group self efficacy (Lindsley, Brass, & Thomas, 1995), and group cohesiveness (Mullen & Copper, 1994). One group-level construct which is somewhat similar to the group psychological contract is justice climate (Ambrose & Schminke, 2007), which is individual justice operationalized at the group level. (Li & Cropanzano, 2009). Justice climate is a group-level cognition about how the group is treated (Naumann & Bennett, 2000). Thus, justice climate focuses on how the group as a whole perceives it is being treated by an outsider (Li & Cropanzano, 2009).

While both the group psychological contract and justice climate are concerned with the interaction between employees and the organization, each construct focuses on something different. Specifically, the group psychological contract focuses on the promises and obligations between the employees and organizations, and whether these are fulfilled or not. In contrast, justice climate focuses on how the group perceives that it is being treated (Li & Cropanzano, 2009; Naumann & Bennett, 2000). Thus, the former is concerned with the content of the relationship, while the latter is concerned with the management of the relationship.

As a consequence of the group psychological contract having both structure (based on the group agreement about promises and obligations), as well as function (because of the group-level outcomes), it fits Morgeson and Hofmann's (1999) criteria for considering a unit-level construct scientifically legitimate. Additionally, the group psychological contract is unique from other group-level constructs. In the next section, I describe the antecedents of the group psychological contract, breach of the contract, and both the group- and individual-level consequences of breach.

Models of Antecedents of the Group Psychological Contract Agreement and Consequences of Group Psychological Contract Breach

Figure 1 (pg. 26) illustrates the antecedents of the group psychological contract agreement. As depicted here, agreement about the group psychological contract is influenced by two main antecedents. The first antecedent is the human resource management practices used by the organization, such as recruiting and socialization. The second antecedent, which influences the agreement about the obligations that form the group psychological contract, is the composition of the group in terms of size, personality characteristics, and so forth.

Figure 2 (pg. 26) depicts the consequences of group psychological contract breach. The group psychological contract, like the individual psychological contract, is based on group member perceptions about the mutual obligations between the employer and the group. When group members perceive that the organization has breached the

Figure 1. Antecedents of Group Psychological Agreement

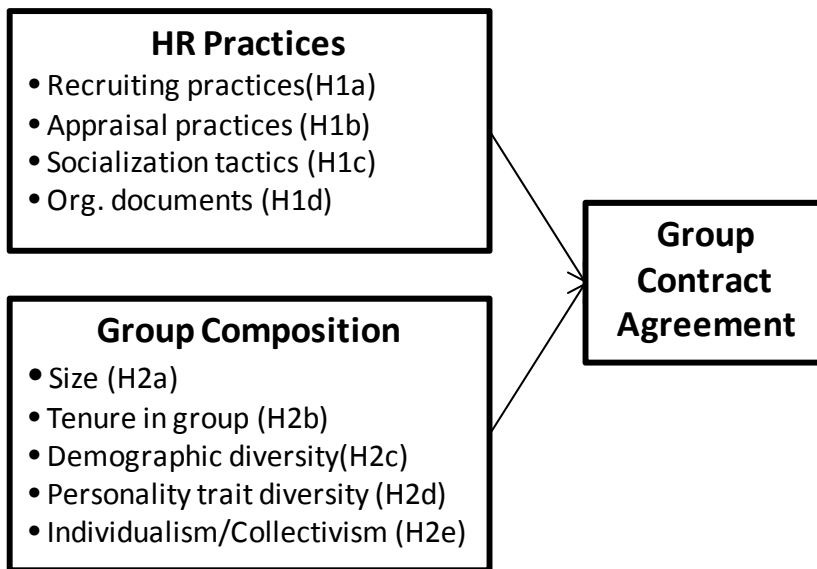
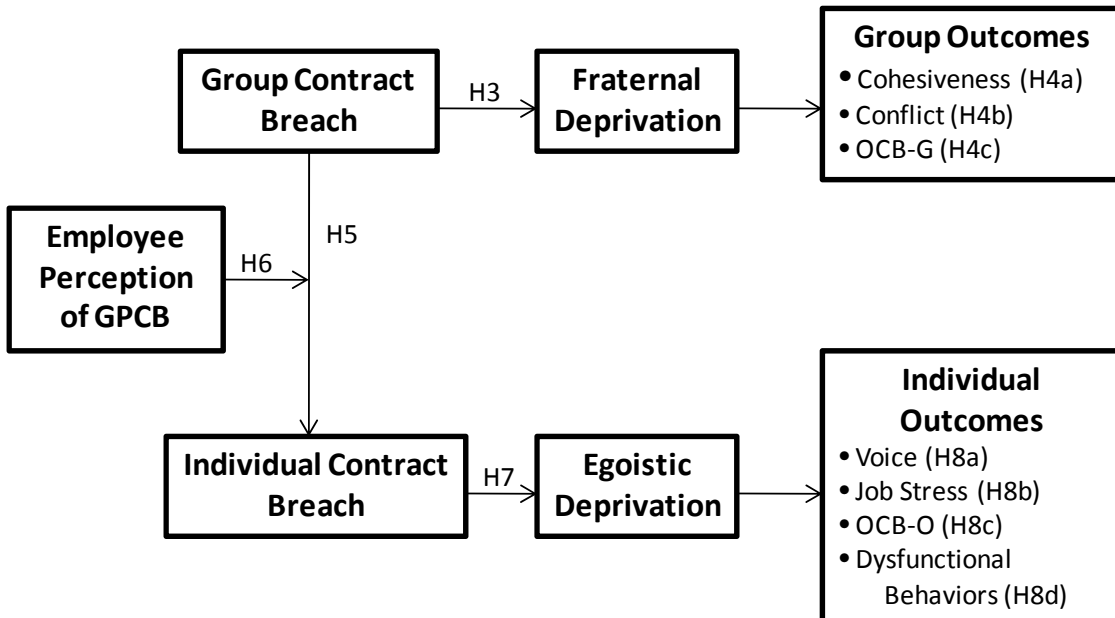


Figure 2. Consequences of Group Psychological Contract Breach



group psychological contract, the group will experience feelings of fraternal deprivation. These feelings will lead to various group-specific outcomes. For example, if the organization does not fulfill the contract by delivering promised rewards, the group will feel fraternal deprivation and is likely to become more cohesive.

In addition to the negative group outcomes associated with group psychological contract breach, the model outlines how breach of the group psychological contract may also influence the individual psychological contracts of group members. Specifically, when the group psychological contract is breached, employees are also likely to feel that their individual psychological contract has been breached. However, this relationship is moderated by employees' perception that their group's psychological contract has been breached. As a result of this individual psychological contract breach, workers will experience feelings of egoistic deprivation. Additionally, it is expected that these feelings of egoistic deprivation will lead workers to engage in behaviors that are harmful to the organization, or they may simply be less likely to go the extra mile for the organization.

The next chapter explains in greater detail the development the group psychological contract and the implications of breaching the group contract both for the group and for individual employees. The role of individual perceptions of group contract breach in the relationship between group psychological contract breach and individual psychological contract breach is also discussed. Finally, hypotheses that summarize these relationships are presented.

CHAPTER 2 HYPOTHESES

Agreement About the Group Psychological Contract:

The Role of Social Information Processing

The group psychological contract does not simply exist when a group is created. The group must be formed, promises extended, and obligations between parties communicated; in other words, the group psychological contract forms in a way that is comparable to the formation of an individual psychological contract. Further, as discussed earlier, the group psychological contract is a combination of all the group members' beliefs about the mutual obligations of the group and the organization. As Morgeson and Hofmann (1999) argued, the collective structure of a group is determined by the individual actions of group members. Here, agreement about what is part of the group psychological contract has important implications for the types of outcomes that will result from the group psychological contract. For both conceptual and empirical reasons then, it is most appropriate to assess the influence of the group psychological contract by examining the degree to which group members agree about the group psychological contract.

If each group member has different beliefs about what is part of the group psychological contract, there will not be agreement among the members about either the obligations of the group to the organization or the promises the group has received from the organization. When there is a lack of consensus among group members about the content of the group psychological contract, agreement about the group psychological contract is low. When there is a low level of agreement about what is part of the group psychological contract, the contract is ill-defined and will have less influence on the

group and outcomes at the group level. In contrast, when there is a consensus about what the group owes the organization, and what the organization owes the group in return, agreement about the group psychological contract is high, and the contract will have greater influence on the group and group-level outcomes.

Social information processing (SIP) theory (Salancik & Pfeffer, 1978) is particularly helpful for understanding how the shared experiences and characteristics of a group will influence agreement about the group psychological contract. SIP theory was developed by Salancik and Pfeffer (1978) as a response to the job enrichment models of job satisfaction (e.g., Hackman & Oldham, 1976). Job enrichment theories, such as the job characteristics model, propose that worker satisfaction is a function of the objective characteristics of their jobs, such as autonomy and the ability to use a variety of skills (Hackman & Oldham, 1976). In contrast, the premise of SIP is that an individual's attitudes, behavior, and beliefs are often shaped by his or her social environment (Salancik & Pfeffer, 1978) rather than the objective characteristics of a position. According to SIP the social environment, and the information available from it (e.g., from coworkers, friends and others), serve as the basis for the development of employee attitudes and beliefs (Jex & Britt, 2008; Salancik & Pfeffer, 1978).

As individuals strive to make sense of their world, they turn to “salient, relevant, and credible information” that exists in the environment around them (Zalesny & Ford, 1990, p. 207). Employees collect this information through the observation of coworkers, by listening to coworker comments, and from their own personal interactions with these individuals (Thomas & Griffin, 1983). Studies have found this information greatly influences the perceptions, attitudes, and beliefs about one's self, job, and organization

(e.g., Burkhardt, 1994; Ibarra & Andrews, 1993). As such, SIP suggests that the observations of other group members, comments from other group members, and shared experiences as a group will influence the beliefs of employees about the group psychological contract.

In a group setting, individual members are likely to have greater opportunities (i.e., than those who are not part of the group) to observe and interact with one another. Additionally, group members will have shared experiences and interact regularly, providing more frequent opportunities to share thoughts about their work and the organization with each another. For these reasons, a group psychological contract is more likely to form when group members have repeated opportunities to observe one another, share their views, and have common experiences. Moreover, the greater the frequency of shared observations, interactions, and experiences among group members, the higher the expected agreement among group members about the group psychological contract. Drawing upon SIP theory, two primary antecedents are conceptualized to influence the level of agreement about the group psychological contract: HRM practices and group composition.

As explained in the section above, SIP theory suggests that individuals' experiences influence their attitudes and beliefs (Salancik & Pfeffer, 1978), and group members share many collective experiences as a result of HRM practices. Prior work suggests that employees' recruitment, socialization, training, performance appraisals, and other such HRM-related experiences with the organization are likely to shape psychological contracts (Rousseau & Greller, 1994). Although very little empirical work has been conducted on the formation of the psychological contract, Rousseau and

colleagues (Rousseau, 1995; Rousseau & Greller, 1994) have argued that HRM practices often aid in the creation of psychological contracts through communications or actions that convey the future intent of the organization.

Although we know a great deal about psychological contracts at the individual level, we know relatively little about how the psychological contract develops. Indeed, most scholars have focused on questions about contract breach, violation, and the consequences of breach and violation (Zhao et al., 2007); all of these questions relate to the contract after it has already been formed. However, as conceptual work has suggested, HRM practices are likely to play an important role in the development of the contract (Rousseau & Greller, 1994). More generally, prior research suggests that HRM practices play an integral role in shaping employees' experiences in their organization. In particular, HRM practices have been found to influence turnover rates (Shaw, Delery, Jenkins, & Gupta, 1998), OCBs (Deckop, Mangel, & Cirka, 1999), mentoring success (Ragins, Cotton, & Miller, 2000), and other employee outcomes (Wright & Boswell, 2002). It is likely, then, that HRM practices will also have a significant influence on the creation of the group psychological contract.

The other main antecedent of the group psychological contract is the composition of the group, which refers to the group's attributes and nature (Jackson & Joshi, 2002). Attributes, such as group size or members' tenure with the group, are important because they create a context for group members to observe the behaviors of, listen to, and share experiences with other group members. Indeed, the group's composition creates a context that shapes various psychological phenomena (Kozlowski & Bell, 2003); it is from this environment that individuals draw information, which then

influences their attitudes and beliefs (Salancik & Pfeffer, 1978). The more similar individuals in the workgroup are to one another, the more likely they are to be socially integrated (O'Reilly, Caldwell, & Barnett, 1989). Social integration is “the degree to which an individual is psychologically linked to others in a group” (O'Reilly et al., 1989, p. 22). Therefore, the more similar the members of a group are in terms of composition, the more likely they are to view the group psychological contract in a similar way.

Each of these antecedents will have an influence on agreement about the group psychological contract. In particular, these two antecedents create the overall environment in which employees acquire the information needed to shape their beliefs about the mutual promises and obligations that make up the group psychological contract. Moreover, I propose that each of these antecedents will influence group members' agreement about the content of the group psychological contract. In the next section I explain how HRM practices affect agreement about the group contract and offer some specific hypotheses about this relationship.

HRM Practices: The Influence of Bosses, Coworkers, and Documents

SIP theory predicts that employees will turn to their surrounding environment for credible information that they can use to make sense of their situation (Zalensny & Ford, 1990). Employees will find this information as they observe their coworkers, have experiences in the organization, and become familiar with the organization. The initial recruitment and selection phases of organizational entry provide employees with their first exposure to the organization and convey some initial information for the formation of a psychological contract. In particular, Rousseau and Greller (1994) proposed that

HRM practices often lay the foundation of the psychological contract during these two stages and then employee training, performance appraisals, and organizational documentation reinforce it. HRM practices are thought to create and maintain contracts through three principal means. Rousseau and Greller (1994) referred to these practices as “contract makers,” and they include interaction with others, observation of those around the employee, and organizational documentation, with each practice conveying the future intent of the organization. Because the psychological contract is the “individual beliefs, shaped by the organization, regarding terms of an exchange agreement between individuals and their organization” (Rousseau, 1995, p. 9), focusing on HRM practices helps us to understand one critical way in which the organization shapes employees’ beliefs about the exchange agreement.

HRM practices provide an important mechanism through which the organization can influence psychological contracts; for example, employees have opportunities to interact with organizational agents during recruitment and observe their coworkers during socialization. Thus, HRM practices contribute to the social environment around employees (Feldman, 1976), and this social environment provides a context in which employees can interact with one another, observe others, and share experiences. SIP theory predicts that workers will draw information from this context (Zalensny & Ford, 1990), which will then shape their beliefs about the exchange relationship. Indeed, some research suggests that the context created in the workplace through interactions with coworkers and organizational systems is important in the development of the psychological contract (Pate, 2005). Moreover, these interactions, observations, and experiences are all likely to play a role in shaping workers’ views and beliefs about both

the content of the individual psychological contract, as well as the group psychological contract.

Hiring and Appraisal Practices

The organizations' HR system provides a context for promises and obligations to be expressed (Pate, 2005). When employees interact with other organizational members, such as recruiters, managers, coworkers, and mentors, it puts the employee in direct contact with organizational agents, and these interactions shape the employee's psychological contracts. Further, the interaction of employees with these organizational representatives provides opportunities for oral or written communications, through which promises can be made (Rousseau, 1995). Although interactions with anyone associated with the organization may influence employees' psychological contracts, only the recruiter and manager can be considered legitimate agents; that is, only they are authorized to speak for the organization and, as such, can make promises to employees (Rousseau, 1995). Thus, workers will perceive communication with them as more credible. For this reason, the interactions that employees have with recruiters and managers should have greater influence in the shaping the psychological contract (Rousseau, 1995).

Initial contact with the organization typically occurs during the hiring process. At this time, recruiters and managers often communicate not only the expected benefits for employees, but also the performance standards that the organization requires of its workers (Rousseau & Greller, 1994). After individuals have entered the organization, interactions with managers during performance appraisals also contribute to workers' view of the obligations that exist between them and their employer (Pate, 2005). For

instance, during performance appraisals, managers and employees may set goals and discuss the rewards employees will earn if they achieve those goals. Additionally, managers often communicate with groups about their progress, performance, and other essential matters. During these interactions, the manager has an opportunity to shape the entire group's beliefs about expected performance and potential rewards.

These exchanges of promises will create a psychological contract in the mind of individual employees (see De Vos et al., 2003; Payne et al., 2008) and group members. Moreover, the more consistent the interactions between those hiring and the potential employees (who will ultimately work together), the more similar their contracts will be. In this way, these interactions contribute to the development of the psychological contract (Pate, 2005). For example, if employees receive conflicting information during the hiring process they may be confused about what the organization expects of them or what promises have been made. Similarly, the more standardized the performance appraisal process used by an organization, the more likely it is that the psychological contracts among workers will be comparable in content.

For example, if supervisors conduct performance appraisals without any consistency between their employees it is possible that different employees will perceive different promises. In contrast, when both the hiring and performance appraisal procedures are administered in a consistent manner, or through standardized processes, there is less of a chance that group members will be given different promises or develop different beliefs about their obligations. Therefore, the more standardization there is in the interactions during the hiring and performance appraisal processes, the more similar group members will view the group contract.

H1a: In groups whose members experienced a standardized hiring process, there will be greater group psychological contract agreement.

H1b: In groups whose members experience a standardized performance appraisal process, there will be greater group psychological contract agreement.

Organizational Socialization

While at work, employees have the opportunity to observe their coworkers and to see what types of behaviors are expected of them. Likewise, through observation, individuals can see how the organization is fulfilling other employees' psychological contracts. This information will shape both the individual employee's psychological contract (Rousseau, 1995), and his or her group psychological contract. Employee observation is especially intense at the point of organizational entry, when employees are striving to move from being outsiders to insiders. This transition, from outsider to insider status, is referred to as organizational socialization (Van Maanen & Schein, 1979). It is during this initial introduction to the organization that workers learn what key attitudes and behaviors are expected of them if they desire to be successful members of the organization (Bauer, Morrison, & Callister, 1998). Moreover, as new workers gather social information during this time (Blau, 1994; Meyer, 1994), it is likely to shape their psychological contract.

The socialization process is directed by the organization through two different approaches (Van Maanen, 1978). The first approach, which consists of a set of six tactics, is referred to as the institutionalized approach (Van Maanen & Schein, 1979). As a group, this set of tactics creates a highly regimented socialization process, whereby newly-recruited employees are socialized together in specific manner that the organization uses with all employees (Allen, 2006). For example, individuals are not

allowed to perform their job duties until their training is completed, or they may be separated from the rest of the staff while in training (Cable & Parsons, 2001). Given the nature of these tactics, this should result in each of the employees having a similar socialization experience.

The second approach and its corresponding six tactics are referred to as the individualized approach (Van Mannen & Schein, 1979). These types of tactics are intended to create a unique experience for each employee. Thus, under this approach, employees receive little guidance about how to do their jobs; instead they are expected to acquire their knowledge through trial and error. While these tactics grant greater control to those who are socializing the new employee, they also place greater responsibility on the new employee. In particular, new hires must select their socialization agents, which may or may not result in favorable outcomes (Van Mannen & Schein, 1979). Consequently, the use of individualized tactics of socialization is more likely to result in a different experience for every employee than the use of institutionalized tactics.

Overall, then, the different socialization tactics used by an organization should result in different interactions, observations, and experiences for each employee. This means that an organization's approach to the socialization of its workers may produce different psychological contracts. Specifically, the institutionalized approach to socialization should result in similar individual psychological contracts, and a more unified group-level psychological contract. In contrast, an individualized socialization experience should result in the employee being exposed to different organizational agents, which will increase the likelihood that different promises will be made to

different employees. Individualized socialization, then, will result in a wider variety of individual psychological contracts and decrease the possibility that a group contract will form among employees. Thus, I predict that group members who experience an institutionalized socialization process will have a similar view of the group's psychological contract.

H1c: In groups whose members have been socialized using institutionalized tactics of socialization, there will be greater group psychological contract agreement.

Organizational Documentation

In addition to the roles that organizational actors play, there are other aspects of organizational life that also influence the formation of the psychological contract.

Rousseau (1995) suggested that structural signals, or the processes and practices of communication within an organization, convey the future intent of the organization and could have an impact on the psychological contract. HRM systems can convey information to employees through organizational documents, such as policy manuals and memos (Pate, 2005; Rousseau, 1995). These documents can inform new employees about compensation and benefits, operating policies, probable career paths, and other relevant information. Additionally, personnel manuals may shape psychological contracts, because they typically outline the standards of performance for workers in an organization (Rousseau, 1995). While documents may not have as much influence as recruiting activities or socialization practices, they do provide tangible information, from which employees are likely to form beliefs about promises and obligations (Rousseau & Greller, 1994). Moreover, if all of the organization's employees see and read the same organizational documents, they will be more likely to develop similar

psychological contracts. Therefore, when the members of a group are exposed to the same organizational documents, it is more likely that they will view the group contract in a similar way.

H1d: In groups whose members are exposed to the same organizational documentation, there will be more group psychological contract agreement.

Who Makes Up the Group: Group Composition

As noted earlier, groups provide the context in which employees function in organizations and this context, which surrounds an employee, is thought to influence the psychological contract (Pate, 2005; Rousseau, 1995; Rousseau & Greller, 1994). The group context “moderates or shapes other behavioral and social phenomena” (Kozlowski & Bell, 2003, p. 338). Further, the composition of a group, or team, reflects the attributes and nature of its members (Jackson & Joshi, 2002). Group composition is the combined characteristics of individual team members (Stewart, 2006). Skills, abilities, dispositions (Driskell, Hogan, & Salas, 1987), group size, demographics, and personality (Kozlowski & Bell, 2003) are all characteristics of composition identified by prior research in the groups literature. Group composition is important because the combination of various characteristics can have a powerful effect on many different group outcomes (Kozlowski & Bell, 2003). In order to gain a better understanding of which group characteristics are important in the formation of the group psychological contract, we return to SIP theory.

Drawing from SIP theory (Salancik & Pfeffer, 1978), we know that if group members interact frequently with one another, observe similar things, and have had the same types of experiences, there is a greater possibility that they will develop similar attitudes and beliefs. Furthermore, the similarity-attraction paradigm (Byrne, 1971)

suggests that individuals who are similar are more likely to be attracted to each other and to spend time together. Thus, if groups are composed of similar individuals they will spend more time with one another, and the more time they spend around each other, the greater number of interactions, observations, and experiences they will have with one another. All of this increases the likelihood that group members will have the same view of the group psychological contract.

Group composition variables influence group outcomes in many different ways (see Stewart, 2006), and as such, I expect the group's composition to influence the outcome of group psychological contract agreement as well. Group researchers have examined many different elements of composition (e.g. Kozlowski & Bell, 2003; Moreland & Levine, 1992). Team size, demographic characteristics, dispositions, cognitive abilities, personalities, external connections, and previous work together have all been considered as different dimensions of group composition that could affect overall group performance (Hollingshead, Wittenbaum, Paulus, Hirokawa, Ancona, Peterson et al., 2005; Kozlowski & Bell, 2003). In this dissertation, I focus on the composition variables that are most likely to influence the group psychological contract—namely, the size of the group, the average tenure of group members, the demographic characteristics of group members, the personality traits of group members, and the level of individualism-collectivism within the group.

Group Size

The size of a group has a strong influence on the way that group interacts and how it performs on different types of tasks (see Bonito & Hollingshead, 1997). As individuals seek information from those around them (Salancik & Pfeffer, 1978), the

greater the number of individuals, the greater the potential for different types of information. Workers looking for credible information (Zalesny & Ford, 1990) are likely to consult as many different sources of information as possible. In the context of the group psychological contract, the larger the group is, the greater the number of potentially different viewpoints about the group psychological contract. In other words, the more individuals in a group, the less likely it is that they will all perceive that similar promises and obligations exist between the group and the organization. As such, it is expected that group size will be inversely related to agreement about the group psychological contract, such that the larger the group, the less agreement there will be about the group psychological contract. For this reason, I hypothesize that the smaller the group, the greater agreement there will be about the group psychological contract.

H2a: In groups that are smaller, there will be greater group psychological contract agreement.

Group Tenure

Research indicates that there is link between group members' previous experience with each other and group performance. In particular, groups in which individuals have previously worked together are able to solve problems better than groups where members lack prior experience with one another (Moreland, 1999). The similarity-attraction paradigm suggests that the more time workers spend around one another, the more shared interactions, observations, and experiences they will have together (Byrne, 1971).

Building on this prior research, and using the similarity-attraction paradigm as a theoretical lens, I suggest that the amount of time employees have been in a group (i.e.,

their tenure with the group) will influence agreement about the group psychological contract. Group tenure, in this dissertation, refers to the amount of time that an individual has been part of a particular group. Based on both SIP (Salancik & Pfeffer, 1978) and the similarity-attraction paradigm (Byrne, 1971), I expect that as individuals spend time around one another, exchanging information and observing each other, there are more opportunities to influence each others' views of the group psychological contract. The longer individuals have been part of a group, the more opportunities they will have to influence one another. Therefore, I predict that the more time a group has spent together, the greater the agreement there will be about the group's psychological contract.

H2b: In groups where tenure levels of group members are high, there will be greater group psychological contract agreement.

Demographic Characteristics

A great deal of research has sought to understand the influence of demographic differences on groups (Williams & O'Reilly, 1998). Demographic differences include the gender, racial, and cultural differences of group members (Hollingshead et al., 2005). The similarity-attraction paradigm (Byrne, 1971) predicts that similar individuals will have a greater influence on one another. Research findings indicate that people who are similar to one another are more likely to be attracted to one another, communicate with one another, act the same way, and have lower levels of conflict than people who are dissimilar (e.g., Lincoln & Miller, 1979). In one study, for example, researchers found that individuals were more likely to engage in antisocial behavior when they were part of a group where other group members also engaged in such behavior (Robinson & O'Leary-Kelly, 1998). This stream of research also suggests that group members who

share the same demographic characteristics will have similar attitudes and behaviors. For example, group members who are married may view work-life balance as more important than those who are not married. Thus, the more diversity in the demographic characteristics, the less likely it is that group members will agree about what is part of the group psychological contract.

H2c: In groups that are more similar in demographic characteristics, there will be greater group psychological contract agreement.

Personality Traits

The next group composition variable considered in the development of the group psychological contract is the similarity of personality traits of each group member. Prior findings suggest that the personality traits of extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience are all related to group interactions in various ways (Moynihan & Peterson, 2001). This set of personality traits is commonly referred to as “the Big Five.” Extraversion captures how sociable, gregarious, and assertive an individual is. Agreeableness is the degree to which a person is trusting, cooperative, and good natured. Individuals who are highly conscientiousness are responsible, dependable, persistent, and organized. The degree to which people are calm, confident, or secure is referred to as their emotional stability. Openness to experience describes how imaginative, sensitive, and curious a person is (Goldberg, 1992).

Because interactions among group members are important for a shared view of the psychological contract, the link between the personality traits of a group’s members and the interactions between them is an important one. Group members with similar personalities are more likely to influence the attitudes and behaviors of other group

members. As explained earlier, the similarity-attraction paradigm (Byrne, 1971) and SIP theory (Salancik & Pfeffer, 1978) suggest that people with similar personalities will be attracted to one another, and the more time they spend with one another, the more likely they are to have similar attitudes, beliefs, and behaviors. For example, if several group members are high in the trait of conscientiousness and, as a result, believe that it is important to be punctual to all work activities (e.g. daily arrival or meetings), this may influence the beliefs of other group members about punctuality. For these reasons, I predict that when group members share personality traits, it is more likely they will agree about what is part of the group psychological contract.

H2d: In groups that group members are more similar in personality traits, there will be greater group psychological contract agreement.

Individualism/Collectivism

The basis for agreement about the group psychological contract is built on group members interacting with each other to collect information about their work environment, which then influences their beliefs, attitudes, and behaviors. Drawing from both SIP theory (Salancik & Pfeffer, 1978) and the similarity-attraction paradigm (Byrne, 1971), I have argued that the more time group members spend with one another, the more likely they are to agree on the promises and obligations that make up the group psychological contract. For this same reason, the level of individualism-collectivism within a group will also be important to the development of the group psychological contract. Individualism-collectivism is the comparative importance that people give to personal interests versus the interest of a group or other collective (Wagner, 1995). This personal characteristic reveals whether individuals value independence or interdependence (Markus & Kitayama, 1999). People who are more

individualistic view themselves as independent from the group, whereas those who are more collectivist see themselves as “inherently interdependent with the group to which they belong” (Goncalo & Staw, 2006, p. 97). Those who believe they are interdependent will spend greater amounts of time around group members (Byrne, 1971), which increases the likelihood that an individual’s views of the group psychological contract will be influenced by others in the group. If a group is composed of members who are collectivist by nature, then it is more likely that they will agree on the promises and obligations between the group and the organization. Thus, I propose that the more collectivist a group is the more likely group members are to agree about the promises and obligations that make up the group psychological contract.

H2e: In groups where there are higher levels of collectivism, there will be greater group psychological contract agreement.

Now that I have identified the key antecedents of agreement about the group psychological contract, I will turn to the potential outcomes of this contract. Specifically, in the next section, I will outline the relationships between both group and individual psychological contract breach and feelings of deprivation. I will also explore the relationships between feelings of deprivation and various outcomes at the group and individual level. Importantly, I will examine the relationship between group and individual psychological contract breach, and the role that agreement about the group psychological contract plays in this relationship.

Breaching the Group Contract

The fulfillment of employees’ psychological contracts is critical to keeping workers happy. In order to make predictions about the outcomes associated with group psychological contract breach, I will use relative deprivation theory as an overarching

framework. Relative deprivation theory proposes that individuals compare their rewards with the rewards of referent others. When people determine that they are receiving less than they should, compared to others, they will begin to feel deprived and respond to their feelings of deprivation in predictable ways (Cosby, 1976; Martin, 1981; Walker & Smith, 2002). This theory is especially appropriate for examining psychological contract breach, because it is focused on disadvantaged individuals (e.g., those whose contracts have not been fulfilled), their feelings of deprivation, and the behaviors they engage in as a result of breach (Cowherd & Levine, 1992; Martin, 1981).

According to relative deprivation theory, feelings of deprivation lead to four general behavioral reactions: efforts at self improvement, constructive attempts to change the system, symptoms of stress, and violent attempts to change the system (Crosby, 1976; Martin, 1981). These four responses to deprivation fit into two general areas: constructive responses and negative responses. When engaging in constructive responses, individuals focus on improving themselves or the system within which they exist (Martin, 1981). Negative responses encompass both the stressful feelings that result from feelings of deprivation and the harmful behaviors that individuals may direct at the system. For example, an employee may feel job stress because of deprivation and lash out at the organization through increased absenteeism (Martin, 1981). These behavioral responses are consistent for both types of relative deprivation: fraternal and egoistic (Martin, 1981).

Relative deprivation theory has two basic levels (Crosby, 1976): fraternal and egoistic. When considering the group psychological contract, the fraternal level is especially important. Fraternal deprivation occurs when members of a group compare

themselves to dissimilar individuals, or those who are not in the same group as them (Martin, 1981) and conclude that they (and the other members of their group) have been deprived relative to members of the referent group or compared to the situation the group expected to have. In other words, this type of deprivation is focuses on the group and how group members have been disadvantaged as a result of their membership in that particular group. For this reason, fraternal deprivation will be the focus of the discussion as I examine group psychological contract breach; egoistic deprivation will then be used later to understand individual psychological contract breach.

Fraternal deprivation has often been discussed in terms of race or status (Crosby, 1976, 1984; Martin, 1981). For example, blue-collar workers who suffer through an hourly-wage cut may experience fraternal deprivation if white-collar workers did not receive a comparable reduction in their salary (Crosby, 1984; Martin, 1981). In addition to this type of evaluation, the group may make comparisons between what was promised and what actually occurred (Crosby, 1984). For example, if a bonus was promised to the group for completing a project early, but it was not awarded, even after the group finished early, group members could experience feelings of deprivation. In this case, the feelings of deprivation are the result of comparing what should have occurred to what actually occurred. Thus, I propose that unfulfilled promises to a group are likely to cause group members to experience fraternal deprivation because their group has been disadvantaged relative to their expectations.

H3: Group psychological contract breach is positively related to fraternal deprivation.

Everyone Is Upset: Group Outcomes of Fraternal Deprivation

Relative deprivation theory also gives insight into how employees are likely to react to breaches of psychological contracts. Breach of the group psychological contract will result in feelings of fraternal deprivation when group members view their contract as unfulfilled relative to what they believed was going to happen. Further, when members of the group experience fraternal deprivation, it is likely to result in group-specific reactions, as outlined by relative deprivation theory. Overall, relative deprivation theory provides a comprehensive framework for understanding that group psychological contract breach leads to relative deprivation, which then leads the group to engage in certain types of behaviors as a result of these feelings of deprivation.

The difference in behaviors presented in this dissertation is a function of who engages in the behavior. For example, feelings of fraternal deprivation may draw group members closer together and create a more cohesive group. However, when an individual psychological contract is breached and egoistic deprivation is experienced, then only a single employee will respond. Thus, feelings of deprivation will influence behaviors at both the group- and individual-levels differentially. Drawing on relative deprivation theory, I will now discuss the role of relative deprivation in group psychological contract breach and make predictions about a group's reactions to its feelings of fraternal deprivation.

As described earlier, when promises made to the group by the organization go unfulfilled, group psychological contract breach occurs. Breach at the group level is similar to individual-level breach as described by previous research (see Morrison & Robinson, 1997). Accordingly, I conceptualize group psychological contract breach as

the collective cognition held by members of the group that the organization has failed to live up to its obligations or has not fulfilled important promises made to the group. That is, the group recognizes that the organization is some way has failed to live up to its commitments. This breach at the group level results in the group experiencing fraternal deprivation.

Deprivation at a group level is likely to be more severe than it is at an individual level, because the effects of fraternal deprivation are often more dramatic in comparison to those of egoistic deprivation. Fraternal deprivation typically results in groups of individuals engaging in a collective or group response, such as violence or rioting, rather than in more isolated, individual responses (Martin, 1981). For example, in cases of group psychological contract breach, it is expected that there will be a conflict between the group and the organization, which is potentially more severe than a conflict between a single worker and the organization. However, the specific reactions will vary from group to group. Some groups may respond to fraternal deprivation in ways that are consistent with all four types of the reactions described earlier; however, other groups, may only react in one or two ways (Martin, 1981).

The four types of behaviors that result from relative deprivation—efforts at self improvement, symptoms of stress, constructive attempts to change the system, and violent attempts to change the system—focus on changing the situation. These behaviors can be directed at improving the situation through some positive means, or they can result in negative, even counterproductive, actions that create more difficult circumstances (Crosby, 1976; Martin, 1981). Furthermore, behaviors may be directed at one of two targets, either the individual (in this instance the group) or the system (here,

the organization). Thus, feelings of fraternal deprivation will either lead to the group seeking to improve itself or to retaliating against the organization in some form of counterproductive behavior.

Constructive Reactions to Fraternal Deprivation

Constructive behaviors that result from feelings of deprivation are ones that focus on improving the group itself and in some cases improving the organization (Martin, 1981). One positive way in which fraternal deprivation is likely to affect the group is by bringing them closer together, in other words, the creation of a more cohesive group. Group cohesiveness describes the sum of forces acting on group members to maintain their participation in the group (Festinger, 1950); moreover, it is often something outside the group causes the members of the group to become more committed to the group. When a group is cohesive they have higher levels of interpersonal attraction, feel more committed to their task, and experience group pride (Mullen & Copper, 1994). Prior research indicates that when groups feel threatened or wronged, they tend to become more cohesive (Mullen & Copper, 1994). Thus, when groups feel deprived because of a breach of their group psychological contract, they should become more cohesive.

Attempts at constructive change may focus on changes to the organization, which will improve the position of the group. Group members who feel the group psychological contract has been breached may seek to improve the circumstances around them by striving to help one another. They may help group members by engaging in OCBs, such as helping them with a difficult task or listening to their personal problems (Settoon & Mossholder, 2002). By engaging in acts of citizenship

behavior targeted towards group members (OCB-G), these workers will be improving the functioning of their group (Podsakoff, Ahearne, & MacKenzie, 1997), and as a result, they should also benefit personally because individuals and groups who perform OCBs tend to be rewarded for such behavior (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Thus, I propose that feelings of fraternal deprivation will increase the level of cohesiveness in a group and the level of OCBs directed towards the group.

H4a: Fraternal deprivation is positively related to group cohesiveness.

H4b: Fraternal deprivation is positively related to organizational citizenship behaviors targeted toward the group (OCB-G).

Negative Reactions to Fraternal Deprivation

Fraternal deprivation may also lead to negative behaviors. The focus of these feelings can be directed inward, upon the group itself, or outward towards the organization (Crosby, 1976; Martin, 1981). One result of fraternal deprivation is greater levels of conflict between the group and the organization. Conflict happens when there is some type of incompatibility (Jehn, 1995). Conflict often occurs when group members disagree with the organization about how to proceed with the accomplishment of their tasks, or how to handle logistical and delegation issues (Jehn, 1997). Groups experiencing fraternal deprivation will have an incompatibility, and thus a conflict with the organization, because of the group psychological contract breach. Thus, elevated levels of conflict between the group and the organization can be an indicator of the stress generated by fraternal deprivation. Thus, I predict that fraternal deprivation will be positively related to the negative outcome of conflict between the group and the organization.

H4c: Fraternal deprivation is positively related to levels of conflict with the organization.

I'm With Them: Individual Contract Breach

The model presented in Figure 2 (see pg. 26) indicates that group members who experience group psychological contract breach are more likely to feel that their individual psychological contract has also been breached. These workers may feel that even though the organization is living up to the promises it made them, a breach of the group's psychological contract influences their own personal psychological contract. In other words, these individuals are likely to feel strongly that, because the organization has not fulfilled its promises to the group, their own personal contract has been breached. Thus, if an employee belongs to a group whose group psychological contract has been breached, it is more likely that an employee will see his or her own individual psychological contract as breached, than if the group's psychological contract is being fulfilled.

H5: Group psychological contract breach is positively related to individual psychological contract breach.

We All Look At This the Same Way: How Individual Perception of Group Contract Breach Moderates the Relationship Between Group and Individual Psychological Contract Breach

Individual perceptions of group psychological contract breach should play an important role in determining the impact that group psychological contract breach will have on individual psychological contract breach. As discussed earlier, individual group members may often have different perceptions about what the organization has promised to the group. Thus, when the organization fails to live up to its obligations to the group, some members of the group may perceive that the group's contract has been

breached. However, other members of the group may not feel that the contract was breached or that the unfulfilled promises were ever even a part of the group's contract.

For example, some members of a group may perceive that the group has been promised a flexible schedule; thus, these employees may come in late or leave early as the need arises, compensating for this by working extra on other days. However, other members may feel that a flexible schedule is not something that the organization has promised to the group. If this benefit is revoked by the organization, some group members will perceive a breach, while others will not share this sentiment. Thus, a critical moderator of the relationship between group psychological contract breach and individual psychological contract breach is an individual group member's perception of the degree to which the group contract has been breached. Therefore, I propose the following:

H6: Individual perceptions of group psychological contract breach moderates the relationship between group contract breach and individual contract breach based on the individual group member's perception of group-level breach. Specifically, the relationship between group contract breach and individual psychological contract breach will be stronger when the individual group member perceives that a group breach has occurred.

I Was Promised More: Individual Contract Breach and Egoistic Deprivation

Egoistic deprivation is the individual-level deprivation described by relative deprivation theory. Egoistic deprivation focuses on a person's own welfare and his or her concern for him or herself. This type of deprivation occurs when people compare themselves to those around them and realize that they are deprived relative to the other members of their group, or other members of the organization (Crosby, 1976, 1984; Martin, 1981). Building on the example offered earlier in the paper, a blue-collar worker is likely to experience egoistic deprivation if he or she were the only blue-collar

worker required to take a pay cut. When the obligations of the organization to individual workers are unfulfilled, individuals will make comparisons with their coworkers to see if the organization is fulfilling its obligations to them. Employees may also compare what the organization had promised to them with what it has delivered. If the organization is fulfilling its obligations to others, or the employee feels that not all the promises to him or her are being fulfilled, egoistic deprivation will occur. These feelings of egoistic deprivation arise because employees realize that they are being denied what others have, or what they were promised (Crosby, 1984). Therefore, I predict that individual psychological contract breach will lead to higher levels of egoistic deprivation.

H7: Individual psychological contract breach is positively related to egoistic deprivation.

I Deserve Better Than This: Individual Outcomes of Egoistic Deprivation

Egoistic deprivation will be associated with the same general outcomes of deprivation as described earlier: efforts at self improvement, constructive attempts to change the system, symptoms of stress, and violent attempts to change the system. This section will focus on the consequences of egoistic deprivation, which occurs after individual psychological contract breach. Specifically, I expect that egoistic deprivation will result in behaviors that the employee directs inwardly (i.e., toward him or herself) or outwardly (i.e., toward the organization) (Crosby, 1981, 1984). With regard to outcomes that focus inwardly, employees may pursue additional training to improve themselves, and they may also experience higher levels of stress. When considering to behaviors targeted outwardly at the organization, employees may offer

feedback aimed at constructively improving the situation, or they may engage in counterproductive work behaviors that harm the organization, or some combination of both constructive and counterproductive work behaviors may result.

Constructive Reactions to Egoistic Deprivation

As previously discussed, people may engage in constructive behaviors to improve their situations because of feelings of deprivation (Martin, 1981). In particular, employees may seek to address or resolve feelings of deprivation by engaging in elevated levels of voice. Voice behavior occurs when employees seek to improve a situation using constructive communications (LePine & Van Dyne, 2001). Prior research has linked psychological contract breach with increased levels of voice behavior (Turnley & Feldman, 1999). I propose that workers who experience egoistic deprivation will engage in voice behavior by making recommendations about issues that concern the group or by suggesting changes that may affect the quality of the work life in the group. For these reasons, I predict:

H8a: Egoistic deprivation is positively related to individual levels of voice.

Negative Reactions to Egoistic Deprivation

Egoistic deprivation can also lead people to feel higher levels of stress and engage in negative behaviors (Crosby, 1976; Martin, 1981). Conservation of resources theory (Hobfoll, 1989) suggests that people experience stress when the things they value are harmed, threatened, or lost; in this case, promised rewards are lost. Likewise, relative deprivation theory suggests a strong link between egoistic deprivation and stress (Martin, 1981). Thus, group members who have feelings of deprivation are more likely to experience higher levels of stress than group members who are not suffering

from feelings of egoistic deprivation. Thus, egoistic deprivation is expected to result in higher levels of stress for employees.

These group members may also engage in aggressive behaviors toward the organization. It is highly unlikely that employees will engage in truly violent attempts at systems change (Martin, 1981). A “violent” effort to change the system may manifest in a passive-aggressive attempt to decrease the productivity of the organization. In particular, workers who are experiencing egoistic deprivation may withhold OCBs that would benefit the organization (OCB-O). Indeed, prior work (Turnley et al., 2003) found that employees who experienced psychological contract breach are more likely to reduce OCBs directed at the organization (i.e., more so than OCBs targeted at the group). Thus, I propose that egoistic deprivation is negatively related to OCB-Os.

With regard to other outcomes, previous studies of behavioral reactions suggest that some individuals participate in riots, rebellions, and other types of civil action in response to feelings of deprivation (Martin, 1981). While nothing so dramatic is predicted because of egoistic deprivation in the workplace, some group members may react aggressively to the feelings of egoistic deprivation they experience. In particular, it is expected that individuals will be more likely to engage in dysfunctional group behaviors directed at the organization in such situations. Dysfunctional group behaviors are any behaviors by a group of employees intended to impair organization functioning (Cole, Walter, & Bruch, 2008). For example, members of groups whose feelings of deprivation are high may actively hinder progress on organizational projects, seek to participate in actions that weaken the organization, or disobey supervisors’ instructions. Therefore, it is predicted that egoistic deprivation will cause group members to

experience greater levels of stress, withhold citizenship behaviors toward the organization, and engage in dysfunctional behaviors.

H8b: Egoistic deprivation is positively related to job stress among individual group members.

H8c: Egoistic deprivation is negatively related to organizational citizenship behaviors toward the organization (OCB-O).

H8d: Egoistic deprivation is positively related to dysfunctional group behaviors.

The next chapter provides a detailed description of the sample used to test these eight hypotheses. The data collection instrument and measures used to collect the data are described as well.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes the research site, the sample, the data collection procedures, as well as the data collection instruments and the operationalizations for each of the measures used in this study.

Research Site

Data for this study were collected from a single research site. This research site is a regional bank located in the Midwestern United States. The research site was selected because employees in this organization are naturally nested in groups within the bank. The bank has 28 branches, in addition to five departments (e.g., information technology, human resources) located at the company headquarters. These organizationally-defined groups were important for this research, because they provided an ideal sample for investigating group psychological contracts.

Sample and Data Collection Procedures

The sample consists of all employees (excluding executive officers) of the regional bank, which employs 333 individuals. Data were collected at two points in time using an online survey instrument. Employees' company email addresses were obtained from the Director of Human Resources (HR). Each bank employee was sent an email that explained the nature of the study and contained a link to the online survey. The first email for the first survey was sent to all 333 employees. This email outlined the nature of the survey and described the incentive (a random drawing for one of three gift cards) for participating. In addition to this email, the HR director sent an email to all potential participants informing them of the survey and encouraging them to participate.

The online survey was open for responses for two weeks. Of the 333 potential respondents who received the survey link, 214 responded, which resulted in an initial response rate of 64%. However, of the 214 who responded, only 144 provided complete, usable data. These 144 respondents were nested in 33 different groups within the organization.

An email containing a link to the second survey was sent out two weeks after the first survey was closed. This email was distributed to the 144 respondents who had agreed to participate in the second part of the survey. As before, this email was also followed up by an email from the HR director to all employees encouraging those employees who had agreed to participate in the second part of the data collection to complete the survey. One hundred and twenty nine (129) employees responded to the second survey. Of these, I was able to match 124 respondents across both surveys. The final sample of 124 employees represents an overall response rate of 37%. These 124 respondents were nested in 29 different groups. Each of the groups had a minimum of two respondents, with a maximum of 14; however, the actual group size was larger than the response size.

To test for differences between respondents and non respondents, I used a logistic regression technique outlined by Goodman and Blum (1996). This technique assists in determining if there is a bias in the attrition of respondents that may contribute to non-random sampling. I specified a regression equation that had participation in the second part of the survey as the dichotomous dependent variable. Next the following variables—gender, age, race, education, tenure, group psychological contract breach, and individual psychological contract breach—were each used as independent variables

to predict participation in the second survey. None of the independent variables significantly predicted the participation variable. According to Goodman and Blum (1996), this suggests that researchers can be confident that attrition in the sample will not bias their subsequent data analyses.

In addition to the survey completed by employees, a survey was sent to the supervisors of those 144 employees who agreed to participate in the second part of the survey. Because there were respondents in each of the 33 groups, this email was distributed to the supervisors of each of the 33 groups. Supervisors were asked to rate the levels of conflict, cohesiveness, and OCBs in the group. Responses were received from supervisors of 18 of the 33 groups, resulting in a 54% response rate.

Sixty-eight percent (68%) of the respondents were female. The majority (59%) of the respondents were under the age of 40, with the greatest number of respondents (24) ranging from age 21 to 25. Caucasians comprised the majority of the sample (87%), with African-Americans and Hispanics each making up 4% of the sample; the remaining 5% of the sample was composed of Native Americans, Asians, and those in the "Other" category. Thirty-four percent (34%) of the sample had earned a bachelor's degree, 8% had obtained an associate's degree, and 41% of workers had some taken some college credit. The average tenure of employees in the sample was 7.76 years, with a standard deviation of 7.81 years. Of the 29 groups that responded at time two, the average group size was 11.73 members, with a standard deviation of 6.96 members. On average, individuals had been members of their group for 7.56 years, with a standard deviation of 4.88 years.

Measures

To measure the constructs of interest I used existing measures, measures developed for this study, and previously-established measures with a “referent shift” to change the unit of analysis from the individual-level to the group-level. A referent shift occurs when the focal referent of a construct is moved to another, in this case higher, level (Chan, 1998). In selecting measures, adapting items, and developing items I focused on two central criteria. First, I sought to avoid double-barreled items in order to ensure that respondents’ answers reflected what the item was intended to capture (Converse & Presser, 1986; DeVellis, 1991). Second, I focused on appropriately wording the items for both the referent shift (Chan, 1998) and the context of the sample (e.g., Dabos & Rousseau, 2004). As items were adapted from the group- to the individual-level, it was especially important to make sure that the items made sense at the group-level. Some items were retained with only the referent being shifted, others were adapted, some were dropped, and others were developed specifically for this study.

In this dissertation, the level of measurement (individual level) and the level of analysis (group level) sometimes differed across hypotheses. This occurred because a referent-shift consensus model was used (Chan, 1998) for several of the constructs of interest. For this reason, it was necessary to aggregate some of the data. Typically, when data is aggregated, aggregation statistics are calculated in order to determine if aggregation is appropriate. In this study three aggregation statistics were calculated: r_{wg} values and two intraclass correlations (ICC[1] and ICC[2]). Each of these statistics was calculated for the following variables: hiring processes, performance appraisal

practices, socialization tactics, organizational documents, individualism-collectivism, group psychological contract breach, fraternal deprivation, cohesiveness, conflict, and OCB-group.

R_{wg} values are an index of within-group agreement (James, Demaree, & Wolf, 1984; LeBreton, James & Lindell, 2005). An r_{wg} value is calculated for each group, and then the values are averaged for a mean r_{wg} value for the data (Roberson, Sturman, & Simons, 2007). One of the key strengths of r_{wg} is that it is calculated separately for each group, and as such, the agreement is not based on between-group variability (James, Demaree, & Wolf, 1993). The research questions for this study are focused on group-members' agreement about various practices, promises, and fulfillment of promises, thus, r_{wg} values were of particular interest when justifying aggregation. Additionally, because r_{wg} values fall between zero and one, the interpretation of the statistic is relatively straightforward, such that values closer to one indicate higher levels of within-group agreement (Conway & Schaller, 1988); past research suggests that r_{wg} values above 0.70 indicate reasonable levels of within-group agreement for aggregation (see Hausknecht, Trevor, & Howard, 2009; Kearney, Gebert, & Voelpel, 2009; Wu, Tsui, & Kinicki, 2010).

Next, I conducted a one-way analysis of variance (ANOVA) to examine the between-group variability through the ICC(1) statistic. The ICC(1) is a measure of the variance explained by unit membership. A non-zero ICC(1) value indicates that group membership influences the ratings of the lower-level observations (Bliese, 2000). Ideal ICC(1) values typically range between 0.05 and 0.20; the higher the ICC(1) value, the greater the degree to which lower-level variance is accounted for by contextual factors

at the group-level (Bliese, 2000; Snijders & Bosker, 1999). The final aggregation statistic I calculated is an ICC(2), which is an index of the group mean reliability (Bliese, 2000; James, 1982; McGraw & Wong, 1996). Because the ICC(2) is an index of the reliability of the group mean, higher values indicate more reliable means (Raudenbush & Bryk, 2002); values above 0.70 are considered ideal (Wu et al., 2010). Aggregation statistics for each of the group-level measures, including the ANOVA results for the ICC(1), are reported below in the corresponding variable descriptions.

All items were reviewed by the HR director and the assistant director of HR to ensure that each of the items were appropriate for the organizational setting. Of particular concern were the psychological contract and OCB items. Both the HR director and the assistant HR director suggested changes for some of the psychological contract items so they would more appropriately capture the promises that the organization has made to the employees. All items are displayed in Appendix A (RS indicates that the item has been reverse scored). All items, unless otherwise stated, were measured on a 7-point Likert-type scale ranging from 1 (Disagree strongly) to 7 (Strongly agree). Correlations, means, standard deviations, and alphas for all variables at the individual level are reported in Table 1 on page 64. The same statistics are reported for the group-level variables in Table 2 on page 67.

HRM Practices

Standardized hiring practices. Three items tapped the respondents' overall assessment of the consistency of the hiring process. The three items used were: "I sometimes received conflicting information during the hiring process;" "The hiring process seemed very organized" (reverse scored); and "During the hiring process every

Table 1

Means, Standard Deviations, Correlations, and Scale Reliabilities at the Individual Level

Variable	M	SD	1	2	3	4	5	6	7	8	9
1 Age	4.93	2.44	-								
2 Gender	1.68	0.47	0.26 **	-							
3 Race	1.36	1.05	-0.14	-0.10	-						
4 Education level	3.64	1.40	-0.19 **	-0.33 **	-0.02	-					
5 Hiring practices	5.30	1.22	-0.08	-0.16	0.03	0.06	0.81				
6 Appraisal practices	5.34	1.34	-0.02	-0.22 *	0.01	0.08	0.47 **	-			
7 Socialization tactics	4.24	0.90	-0.10	-0.10	0.14	-0.03	0.54 **	0.27 **	-		
8 Organizational documents	5.07	1.19	-0.14	-0.22 **	0.14	0.04	0.53 **	0.35 **	0.81		
9 Group size	11.73	6.96	0.32 **	0.19 *	0.01	-0.40 **	-0.16	-0.18 *	0.51 **	0.79	
10 Group tenure	7.57	4.88	0.50 **	0.21 **	-0.01	-0.11	-0.16	-0.05	0.04	-0.12	-
11 Demographic diversity	2.92	0.97	0.25 **	0.10	0.06	-0.17	-0.16	-0.18 *	-0.22 *	-0.12	0.06
12 Personality trait diversity	2.49	0.76	0.09	0.07	0.01	-0.11	-0.02	-0.12	-0.04	-0.10	0.70 **
13 Individualism-collectivism	5.25	0.74	0.18 *	0.12	0.13	-0.13	-0.10	-0.12	0.12	0.01	0.41 **
14 GPC agreement	0.98	0.01	-0.05	-0.04	-0.05	0.16	0.10	0.09	0.32 **	0.06	0.18 *
15 GPCB	3.45	1.30	0.04	0.18 *	-0.05	0.16	0.15	0.07	0.13	0.04	-0.17
16 Fraternal Deprivation	3.05	1.46	-0.10	0.10	-0.18 *	-0.10	-0.54 **	-0.43 **	-0.56 **	-0.53 **	0.07
17 Cohesiveness	4.61	1.02	-0.03	-0.12	0.12	-0.11	-0.48 **	-0.42 **	-0.35 **	-0.33 **	0.17
18 Conflict	2.35	1.04	-0.09	0.15	-0.04	0.04	0.41 **	0.23 **	0.47 **	0.27 **	0.09
19 OCB-Group	5.66	0.76	-0.02	0.00	-0.01	0.03	-0.39 **	-0.32 **	-0.44 **	-0.43 **	0.01
20 Ind. Percept. of GPCB	3.41	0.77	0.18 *	-0.01	0.00	0.11	0.12	0.06	0.13	-0.04	-0.07
21 PCB	3.51	1.03	-0.10	0.16	-0.14	-0.18 *	-0.15	-0.12	-0.19 *	-0.15	0.09
22 Egoistic deprivation	2.95	1.54	-0.12	0.07	0.05	-0.02	-0.38 **	-0.37 **	-0.47 **	-0.34 **	-0.02
23 Job stress	4.35	1.33	0.17	0.16	-0.14	-0.01	-0.43 **	-0.36 **	-0.38 **	-0.29 **	0.08
24 Voice	5.10	1.05	-0.13	-0.11	0.11	0.05	-0.16	-0.15	-0.26 **	-0.32 **	-0.04
25 Dsy. group behaviors	2.53	1.15	-0.05	0.19 *	-0.02	0.15	0.24 **	0.16	0.18 *	0.07	-0.07
26 OCB-O	6.11	0.87	-0.02	-0.22 **	0.19 *	-0.25 **	-0.41 **	-0.25 **	-0.31 **	-0.20 *	0.00
						0.20 *	-0.11	0.03	-0.10	-0.02	-0.04

Note: Cronbach's alpha appears along the diagonal in italics. GPC = group psychological contract, GPCB = group psychological contract breach, Ind. Percept.=individual perceptions, OCB=organizational citizenship behaviors, PCB=individual psychological contract breach, Dsy=disfunctional, OCB-O=organizational citizenship behavior-organization. * p < .05. ** p < .01.

Table 1 continued
Means, Standard Deviations, Correlations, and Scale Reliabilities at the Individual Level

Variable	10	11	12	13	14	15	16	17	18	19
1 Age	-									
2 Gender										
3 Race										
4 Education level										
5 Hiring practices										
6 Appraisal practices										
7 Socialization tactics										
8 Organizational documents										
9 Group size										
10 Group tenure	-									
11 Demographic diversity	0.21 **	-								
12 Personality trait diversity	0.08	0.45 **	-							
13 Individualism-collectivism	0.01	0.14	0.01	0.80						
14 GPC agreement	-0.07	-0.08	0.04	-0.18 *	-					
15 GPCB	0.18 *	0.10	-0.01	-0.11	-0.26 **	0.96				
16 Fraternal Deprivation	0.11	0.08	-0.09	-0.06	-0.35 **	0.51 **	0.92			
17 Cohesiveness	-0.27 **	0.08	0.06	0.30 **	0.08	-0.46 **	-0.38 **	0.83		
18 Conflict	0.05	-0.05	-0.22 *	-0.02	-0.26 **	0.46 **	0.60 **	-0.37 **	0.96	
19 OCB-Group	-0.09	0.03	-0.10	0.41 **	-0.08	-0.05	-0.01	0.12	0.23 **	0.81
20 Ind. Percept. of GPCB	0.24 **	0.09	0.00	0.10	-0.31 **	0.22 **	0.17	-0.04	0.06	0.03
21 PCB	0.10	0.04	-0.03	-0.16	-0.16	0.75 **	0.50 **	-0.47 **	0.41 **	-0.06
22 Egoistic deprivation	0.17	0.05	-0.04	-0.20 *	-0.27 **	0.51 **	0.74 **	-0.44 **	0.59 **	0.08
23 Job stress	0.05	-0.06	-0.08	0.12	-0.13	0.25 **	0.13	-0.19 *	0.29 **	0.13
24 Voice	-0.09	-0.06	-0.21 *	0.39 **	-0.08	-0.09	-0.01	0.16	0.22 **	0.52 **
25 Dsy. group behaviors	0.19 *	-0.04	0.01	-0.06	-0.17	0.30 **	0.39 **	-0.42 **	0.32 **	-0.15
26 OCB-O	0.13	0.10	-0.04	0.13	-0.12	0.04	0.04	-0.11	0.17	0.21 *

Note: Cronbach's alpha appears along the diagonal in italics. GPCB = group psychological contract breach, Ind. Percept. = individual perceptions, OCB = organizational citizenship behaviors, PCB = individual psychological contract breach, Dsy = dysfunctional citizenship behavior-organization. * p < .05. ** p < .01.

Table 1 continued
Means, Standard Deviations, Correlations, and Scale Reliabilities at the Individual Level

Variable	20	21	22	23	24	25	26
1 Age							
2 Gender							
3 Race							
4 Education level							
5 Hiring practices							
6 Appraisal practices							
7 Socialization tactics							
8 Organizational documents							
9 Group size							
10 Group tenure							
11 Demographic diversity							
12 Personality trait diversity							
13 Individualism-collectivism							
14 GPC agreement							
15 GPCB							
16 Fraternal Deprivation							
17 Cohesiveness							
18 Conflict							
19 OCB-Group							
20 Ind. Percept. of GPCB	<i>0.96</i>						
21 PCB	0.10	<i>0.96</i>					
22 Egoistic deprivation	0.18 *	0.51 **	<i>0.93</i>				
23 Job stress	-0.01	0.07	0.15	<i>0.85</i>			
24 Voice	0.14	-0.08	-0.03	0.03	<i>0.89</i>		
25 Dsy. group behaviors	0.20 *	0.23 **	0.30 **	0.04	-0.01	<i>0.86</i>	
26 OCB-O	0.27 **	-0.02	0.09	-0.01	0.35 **	0.08	-

Note: Cronbach's alpha appears along the diagonal in italics. GPC = group psychological contract, GPCB = group psychological contract breach, Ind. Percept.=individual perceptions, OCB=organizational citizenship behaviors, PCB=individual psychological contract breach, Dsy= dysfunctional, OCB-O=organizational citizenship behavior-organization. * p < .05. ** p < .01.

Table 2
Means, Standard Deviations, Correlations, and Scale Reliabilities at the Group Level

Variable	M	SD	1	2	3	4	5	6	7	8	9
1 Hiring practices	0.98	0.02	<i>0.81</i>								
2 Appraisal practices	5.43	0.51	0.33 *	-							
3 Socialization tactics	5.55	0.57	-0.01	0.53 **							
4 Organizational documents	4.33	0.72	-0.01	0.61 **	0.81						
5 Individualism-collectivism	5.22	0.67	-0.17	0.58 **	0.49 **	0.79					
6 Group size	5.31	0.34	-0.24	0.11	0.03	0.71 **	0.80				
7 Group tenure	3.35	0.72	-0.48 **	-0.60 **	-0.45 **	-0.46 **	-0.44 **	-			
8 Demographic diversity	3.17	1.01	-0.52 **	-0.54 **	-0.49 **	-0.35 *	-0.28	-0.14	-		
9 Personality trait diversity	3.02	1.01	-0.57 **	-0.70 **	-0.26	-0.53 **	-0.47 **	0.07	0.89 **		
10 GPC agreement	4.57	0.59	0.18	0.30	-0.02	0.44 *	0.11	0.15	0.57 **	0.41 *	
11 GPCB	2.43	0.79	-0.45 **	-0.55 **	-0.17	-0.54 **	-0.45 **	-0.11	-0.28	-0.16	-0.46 *
12 Ind. Percept. of GPCB	5.70	0.41	-0.15	-0.01	-0.03	0.10	0.07	0.33	0.38 *	0.23	0.69 **
13 Fraternal deprivation	9.24	5.51	-0.14	-0.37 *	-0.41 **	-0.14	-0.24	0.04	-0.06	-0.04	-0.14
14 Cohesiveness	6.79	5.46	-0.03	-0.24	-0.15	-0.49 **	-0.27	-0.15	0.27	0.35 *	0.38 *
15 Conflict	2.47	1.01	-0.03	-0.37 *	-0.45 **	-0.31	-0.19	-0.11	0.32	0.28	0.26
16 OCB-Group	2.22	0.84	0.05	-0.14	-0.26	-0.01	-0.03	-0.24	0.23	0.40 *	0.21
17 Supervisor: Cohesiveness	4.66	0.87	-0.26	0.30	0.12	-0.01	0.00	0.42	0.01	0.27	-0.26
18 Supervisor: Conflict	2.60	0.69	0.09	0.05	-0.21	-0.25	-0.07	-0.34	0.05	-0.05	-0.10
19 Supervisor: OCB-Group	5.38	0.89	0.02	-0.18	-0.30	-0.05	-0.26	0.21	0.22	0.23	-0.19
									0.37	0.48	-0.05

Note: Cronbach's alpha appears along the diagonal in italics. GPC = group psychological contract, GPCB = group psychological contract breach, Ind. Percept.=individual perceptions, OCB=organizational citizenship behaviors. * p < .05. ** p < .01.

Table 2 continued
Means, Standard Deviations, Correlations, and Scale Reliabilities at the Group Level

Variable	10	11	12	13	14	15	16	17	18	19
1 Hiring practices										
2 Appraisal practices										
3 Socialization tactics										
4 Organizational documents										
5 Individualism-collectivism										
6 Group size										
7 Group tenure										
8 Demographic diversity										
9 Personality trait diversity										
10 GPC agreement										
11 GPCB	-0.29	0.96								
12 Ind. Percept. of GPCB	0.47 *	0.11	0.96							
13 Fraternal deprivation	-0.03	0.15	-0.06	0.92						
14 Cohesiveness	-0.38 *	0.10	-0.35	0.19	0.83					
15 Conflict	0.11	0.03	0.07	0.59 **	0.31	0.96				
16 OCB-Group	0.11	-0.29	-0.07	0.27	0.01	0.39 *	0.81			
17 Supervisor: Cohesiveness	0.34	0.02	0.10	-0.12	0.23	0.03	-0.40	0.77		
18 Supervisor: Conflict	0.23	-0.26	0.38	0.20	-0.11	0.39	0.40	-0.19	0.87	
19 Supervisor: OCB-Group	0.33	-0.18	0.27	0.22	-0.14	0.35	0.25	-0.06	-0.03	0.94

Note: Cronbach's alpha appears along the diagonal in italics. GPC = group psychological contract, GPCB = group psychological contract breach, Ind. Percept.=individual perceptions, OCB=organizational citizenship behaviors. * p < .05. ** p < .01.

new employee who joins this organization receives the same information about being an employee here.” The Cronbach’s alpha for this scale was 0.81. The aggregation statistics were: $r_{wg} = 0.87$; $ICC(1) = 0.01$; $F = 1.06$, *n.s.*; $ICC(2) = 0.05$.

Standardized performance appraisal practices. A two-item scale was used to determine the consistency of performance appraisal practices, as viewed by the employee. The two items were: “The performance appraisal process here is uniformly administered for all employees” and “Every employee goes through the same performance appraisal process as everyone else.” These two items had a 0.57 correlation that was significant at the $p < 0.0001$ level, and a Cronbach’s alpha of 0.72. The aggregation statistics were: $r_{wg} = 0.83$; $ICC(1) = -0.02$; $F = 0.89$, *n.s.*; $ICC(2) = 0.12$.

Socialization tactics. A seven-item measure of socialization tactics (Jones, 1986) was used to assess the socialization experience of employees. The most appropriate items from the formal and sequential subscales were selected. These specific items were chosen because they focused on the uniformity of the socialization process. An example would include: “The movement from role to role and function to function build up experience and a track record that is very apparent in this organization” and “There is a clear pattern in the way one role leads to another, or one job assignment leads to another, in this organization.” The Cronbach’s alpha for this scale was 0.81. The aggregation statistics were: $r_{wg} = 0.79$; $ICC(1) = 0.12$; $F = 1.83$, $p < 0.01$.; $ICC(2) = 0.45$.

Organizational documents. A four-item measure was created for this study in order to determine extent to which documents are used in the organization as well as the quantity of organizational documentation. An example would include: “This organization has a policy for every possible situation” and “We receive a lot of information about how the organization wants us to do things.” The Cronbach’s alpha for this scale was 0.79. The aggregation statistics were: $r_{wg} = 0.84$; $ICC(1) = 0.09$; $F = 1.59, p < 0.05$.; $ICC(2) = 0.37$.

Group Composition

Group size. This variable was measured by using the actual number of individuals in each organizational group. Actual group size information was provided by the HR director. The groups used in this study were formally-designated by the organization prior to the beginning of the study. Most groups were at separate geographic location; five of them were located in the same place, which was at the company headquarters.

Group tenure. Group tenure captures how much time the group members have been working together within the same group. Each group member was asked how long he or she had been working in their current group, and this was then averaged with other group members’ responses to create a group average.

Demographic diversity. Following the process outlined by Jehn, Northcraft, and Neale (1999), demographic diversity measured the heterogeneity of age, gender, race, and education level. An entropy-based index (Teachman, 1980; Ancona & Caldwell, 1992) was used to approximate the demographic diversity within workgroups.

The formula for this index is:

$$\text{Diversity} = \sum - P_i(\ln P_i),$$

where P_i is the proportion of the work unit that has each diversity characteristic. If the characteristic is not represented in the group, the value is zero. This index represents the sum of the products of the proportion of each characteristic in the group and the natural log of its proportion. Higher diversity scores are the result of greater distribution of the characteristics within the group (Jehn et al., 1999). For example, using only gender, if the group is composed of six individuals, five females, and one male, the diversity index is .4506; if all six members are male, then the index is 0.00.

Personality trait diversity. Following a process similar to the one outlined by Jehn et al. (1999), personality trait diversity was used to assess personality-trait diversity. I used the same entropy-based index of diversity, but utilized the Big Five Markers (Saucier, 1994) to measure each group member on the five dimensions of personality. Then, a diversity score for each group was calculated following the same procedures just outlined above (to create the measure of demographic diversity).

Individualism-collectivism. An 11-item measure of individualism-collectivism (Moorman & Blakely, 1995) was used to assess the individualism-collectivism level of employees in a group. An example would include: “I prefer to work with my coworkers rather than work alone” and “Individuals in my group should recognize that they are not always going to get what they want.” The group members’ responses to these questions were then aggregated. The Cronbach’s alpha for this scale was 0.80. The aggregation statistics were: $r_{wg} = 0.95$; $ICC(1) = 0.07$; $F = 1.46$, $p < 0.05$; $ICC(2) = 0.31$.

Group Psychological Contract Agreement

The group psychological contract was measured using a 12-item scale of previously developed psychological contract items (Robinson & Morrison, 1995b; Rousseau, 2000) that were adapted for this study. The referent for each item was shifted to the group-level, according to the procedures proposed by Chan (1998). Additionally, the wording of some items was adapted, so they would more clearly reflect the group-level nature of each question. Each of the items asked workers to indicate the extent to which their employer had promised or was obligated to provide certain outcomes. The Cronbach's alpha for the group psychological contract scale was 0.95.

Group psychological contract agreement was measured using the r_{wg} value of the group members' ratings of the psychological contract items. An r_{wg} value, which is an index of the level of within-group agreement (James et al., 1984), was calculated for each group. This aggregation statistics reflects the degree to which the group members feel that the items are part of the group psychological contract. For this reason group psychological contract agreement was operationalized by using the r_{wg} value of within-group agreement about the group psychological contract items.

Group Psychological Contract Breach

Group psychological contract breach was measured by asking employees the degree to which their employer had provided what they had previously promised or committed to provide to the group. Respondents used a seven-point scale ranging from 1 (Much less than promised) to 7 (Much more than promised). This design has been used in several previous psychological contract studies (e.g., Robinson, 1996; Robinson

& Morrison, 1995b). The Cronbach's alpha for this scale was 0.96. The aggregation statistics were: $r_{wg} = 0.98$; $ICC(1) = 0.12$; $F = 1.79$, $p < .01$; $ICC(2) = 0.44$.

Fraternal Deprivation

Fraternal deprivation was measured with items based on those used by Crosby (1976) and Olsen, Roese, Meen, and Roberson (1995). The original conceptualization of relative deprivation (Crosby, 1976) had six components. However, prior research suggests that two components (wanting more and feeling entitled) explain most of the variance in relative deprivation (Feldman, Leana, & Bolino, 2002). For this reason, the items used in this study focus on capturing group members' feelings of wanting and entitlement. An example would be: "My group wants a better situation in the organization than its current one." The Cronbach's alpha for this scale was 0.92. The aggregation statistics were: $r_{wg} = 0.93$; $ICC(1) = 0.04$; $F = 1.22$, *n.s.*; $ICC(2) = 0.18$.

Group Outcomes

Cohesion. Group cohesiveness has three components: interpersonal attraction, commitment to task, and group pride (Mullen & Copper, 1994). The ten-item measure developed by Carless and DePaola (2000) was used to measure these three dimensions of group cohesiveness; this ten-item measure was used to assess all three aspects of cohesiveness. An example would be: "The employees in our group are united in trying to reach its performance goals." The Cronbach's alpha for this scale was 0.83. The aggregation statistics were: $r_{wg} = 0.92$; $ICC(1) = 0.04$; $F = 1.23$, *n.s.*; $ICC(2) = 0.18$. The Cronbach's alpha for the scale using supervisor ratings was 0.77.

OCBs-directed toward group members (OCB-group). Using a referent shift (Chan, 1998) to move the referent from the individual to group level, OCB-group was

measured with seven items developed by Williams and Anderson (1991). These seven items assess citizenship behaviors directed towards group members. Participants indicated their agreement with statements about various behaviors that are above and beyond their normal duties. An example would be: "I help my group members who have been absent." The Cronbach's alpha for this scale was 0.81. The aggregation statistics were: $r_{wg} = 0.96$; $ICC(1) = 0.01$; $F = 1.08$, *n.s.*; $ICC(2) = 0.07$. The Cronbach's alpha for the scale using supervisor ratings was 0.94.

Group-organization conflict. Conflict between the group and the organization was measured using an eleven-item scale adapted from measures used by Jehn and colleagues (Jehn, 1995; Jehn et al., 1999). Respondents answered questions about the level of conflict between the group and the organization using a seven-point scale ranging from (1) "None" to (7) "A lot." An example would be: "How frequently are there conflicts about ideas between the organization and your group?" The Cronbach's alpha for this scale was 0.96. The aggregation statistics were: $r_{wg} = 0.98$; $ICC(1) = 0.09$; $F = 1.58$, $p < 0.05$; $ICC(2) = 0.37$. The Cronbach's alpha for the scale using supervisor ratings was 0.87.

Individual Perception of Group Psychological Contract Breach

Individual perceptions of group psychological contract breach were measured using the same items used to measure group psychological contract breach, except the data were not aggregated. Thus, this variable captures the individual employee's perception of the degree to which the GPC has been breached. The Cronbach's alpha for this scale was 0.96.

Individual Psychological Contract Breach

Following the same approach used in measuring the GPC, individual psychological contract breach was measured by assessing the individual psychological contract with 21-items from Robinson and Morrison (1995b) and then measuring the degree to which the organization had fulfilled these promises. The Cronbach's alpha for this scale was 0.96.

Egoistic Deprivation

Egoistic deprivation was measured with items adapted from Crosby (1976) and Olsen et al. (1995). These items capture the feelings of wanting and entitlement associated with egoistic deprivation. An example would be: "In general, I ought to have a better job situation than my current one." The Cronbach's alpha for this scale was 0.93.

Individual Outcomes

Job stress. Job stress was measured using a four-item scale taken from Motowidlo, Packard, and Manning (1986). Examples would be: "My job is extremely stressful" and "Very few stressful things happen to me at work" (reverse scored). The Cronbach's alpha for this scale was 0.85.

Voice behavior. Voice was measured using a scale developed by Van Dyne and LePine (1998). Respondents were asked to indicate how frequently they engage in six different voice behaviors. An example would be: "I develop and make recommendations concerning issues that affect this work group" (reverse scored). The Cronbach's alpha for this scale was 0.89.

OCB-O. Citizenship behaviors directed towards the organization were measured with two items developed by Williams and Anderson (1991). The two items were: “My attendance at work is above the norm” and “I give advance notice when I am unable to come to work.” These two items were significantly correlated ($r = 0.59$, $p < 0.0001$), and the Cronbach’s alpha for these two items was 0.75,

Dysfunctional group behavior. A five-item scale was used to measure dysfunctional group behavior. The scale was based on items developed by Cole, Walter, and Bruch (2008) and Skarlicki and Folger (1997). An example would be: “The employees working at this branch sometimes intentionally work slower than they otherwise would.” The Cronbach’s alpha for this scale was 0.86.

Control Variables

There were eight different control variables used in this study. For the group level analyses group size, group tenure, and group demographic diversity were included as control variables in each of the analyses. All of these variables have been described in the section above. At the individual level, categorical variables were used to measure the respondents’ gender (1 = male, 2 = female), age (under 20, 21-25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, and 61 or older), education level (high school, one-year certificate, some college, associate degree, bachelor degree, and graduate degree), and race (White, African American, Native American, Hispanic, Asian, and Other). The final individual-level control variable was individual tenure within the group, which was a continuous variable measured in years.

Confirmatory Factor Analysis

The construct validity of the measures may be assessed through the use of confirmatory factor analysis (CFA) validity. This is accomplished when the confirmatory analysis suggests that the factor structure of the instrument is consistent with constructs that the items are intended to measure (Floyd & Widaman, 1995). The convergent validity of measures can be determined by testing to see if individual items load significantly on to the expected factors (Anderson & Gerbing, 1988). For this reason, a CFA was performed for each of the multi-item measures used in this study. Due to the number of variables in the research model, several CFAs were performed to determine if the individual items loaded significantly onto their respective factors. Specifically, four different models were examined. The first model assessed the validity of the antecedent variables, the second focused on the group-level variables, the next model examined both breach and deprivation, and the final model considered the validity of the individual-level outcomes. Then, to gauge the discriminant validity of the measures, the fit of the intended models was compared to the fit of other plausible solutions. If the data fit the alternative models better than the intended model, the fit of the intended model would be called into question.

Floyd and Widaman (1995) suggest that it is difficult to confirm factor structures when the multiple variables are measured with several individual items from moderately lengthy questionnaires. For this reason, they suggest that the use of CFA with a large number of individual items is unlikely to find satisfactory solutions. In these situations, it is appropriate to use item parcels (e.g., Kishton & Widaman, 1994). Thus, given the length of each of the surveys for this study, I used randomly-created

item parcels in each of the CFAs; at least two randomly-created item parcels were used to assess each construct. Overall, this analysis is intended to provide some evidence for the discriminant validity of the items used to measure several of the independent and dependent variables (Anderson & Gerbing, 1988).

When examining the fit of structural models (including CFA models) there are various indices that are used, each of which addresses a different aspect of model fit. Therefore, a thorough evaluation of a structural model will include the assessment of multiple indicators (Hatcher, 1994; Kline, 1998). For this reason, I used four different indices of model fit: the goodness of fit index (GFI), the adjusted goodness of fit index (AGFI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). Each of these different fit indices has certain strengths. The GFI assesses the relative amount of variance and covariance explained by the model, and the AGFI is a GFI index adjusted for the models' degrees of freedom. Statisticians suggest that GFI and AGFI values above 0.90 indicate a good model fit (Hair, Anderson, Tatham, & Black, 1998; Tabachnick & Fidell, 2007). The CFI is an indicator of fit based on comparisons between the proposed model and a null model that makes no assumptions about relationships between the variables. A value above 0.90 is thought to indicate good fit, while values above 0.95 suggest very good fit for the model (Bentler & Bonett, 1980). Finally, the RMSEA measures the lack of fit in a model, when compared to a saturated model. When the model fit is perfect, the RMSEA value will be 0.00; values of 0.06 or less suggest a good fitting model, while values above 0.10 are indicative of poor-fitting models (Tabachnick & Fidell, 2007). Thus, by

examining all four indices, instead of focusing on a single index, one should get a better sense of the overall fit of the model being examined (Hatcher, 1994; Kline, 1998).

Group Psychological Contract Antecedents

Using a CFA, with a maximum likelihood estimation and randomly-created item parcels, I specified a model that contained the recruiting practices, appraisal practices, socialization tactics, organizational documentation, and individualism-collectivism variables. All items loaded significantly onto their proposed factors. The indices indicate that there is reasonably good fit for this five factor structure ($\chi^2 = 90.74$, $df = 55$; GFI = 0.90; AGFI = 0.84; CFI = 0.92; RMSEA = .07). This five-factor model was also compared with two alternative models in order to provide some evidence of discriminant validity. The first alternative model was a three-factor model in which recruiting practices, appraisal practices, and organizational documents formed the first latent factor, socialization tactics formed the second latent factor, and individualism-collectivism formed the third latent factor. This fit of this model ($\chi^2 = 152.52$, $df = 62$; GFI = 0.84; AGFI = 0.77; CFI = 0.81; RMSEA = .10) was significantly worse than the fit of the five-factor model. The second model was a two-factor model that was similar to the three-factor model, except socialization tactics and individualism-collectivism were combined onto a single factor. Again, relative to the five-factor model, the fit of this model was statistically lower ($\chi^2 = 236$, $df = 64$; GFI = 0.77; AGFI = 0.67; CFI = 0.66; RMSEA = .15). Overall, these comparisons indicate that the five-factor model is the best fitting model of the three proposed models, which provides additional support for the distinctiveness of these five antecedent variables.

Group-Level Variables

I next used a CFA (again with maximum likelihood estimation and randomly-created item parcels), to check for evidence of discriminant validity among the group-level outcomes. A five-factor model was specified, and the results ($\chi^2 = 59.06$, $df = 55$; GFI = 0.93; AGFI = 0.88; CFI = 0.99; RMSEA = .03) suggest that this model fits the data well. Again, the fit of the five-factor model was compared with the fit of two alternative models. The first alternative model specified was a four-factor model that combined group psychological contract breach and fraternal deprivation into a single factor; the second model had three factors—one with group psychological contract breach and fraternal deprivation, the other with cohesiveness and OCB-group, and a final factor containing the conflict items. The five-factor model fit the data significantly better than the four-factor model did ($\chi^2 = 175.47$, $df = 71$; GFI = 0.83; AGFI = 0.76; CFI = 0.91; RMSEA = .11). The fit of the three-factor model was also significantly worse than the fit of the five-factor model ($\chi^2 = 441.75$, $df = 74$; GFI = 0.67; AGFI = 0.52; CFI = 0.71; RMSEA = .19). Overall, then, the results of these analyses provide evidence of the discriminant validity of the group psychological contract breach, fraternal deprivation, cohesiveness, conflict, and OCB-group variables.

Breach and Deprivation

I next specified a model to assess the discriminant validity of the breach and deprivation measures. This CFA model is especially important, because I want to be able to provide some evidence that individual psychological contract breach, group psychological breach, egoistic deprivation, and fraternal deprivation are all distinct constructs. Therefore, I specified a four-factor model using a maximum likelihood

estimation and item parcels. However, the results ($\chi^2 = 91.07$, $df = 29$; $GFI = 0.87$; $AGFI = 0.75$; $CFI = 0.91$; $RMSEA = .14$) suggests that this model provides only marginally good fit for the data. As before, I compared this model with the fit of alternative models that suggest that these variables are not distinct. Specifically, three alternative models were examined. The first model was a two-factor model that combined both breach variables and both deprivation variables into corresponding factors. The fit of this model, though, was significantly worse than the fit of the four-factor model ($\chi^2 = 179.96$, $df = 34$; $GFI = 0.77$; $AGFI = 0.63$; $CFI = 0.83$; $RMSEA = .19$). Second, another two-factor model, combining group psychological contract breach with fraternal deprivation and individual psychological contract breach with egoistic deprivation, was tested. Again though, the fit of this model was significantly worse than the fit of the four-factor model ($\chi^2 = 333.27$, $df = 34$; $GFI = 0.64$; $AGFI = 0.41$; $CFI = 0.64$; $RMSEA = .28$). Finally, a one-factor model was specified, with all item bundles loading onto a single factor. The fit for this one-factor model was extremely poor as well ($\chi^2 = 397.16$, $df = 35$; $GFI = 0.57$; $AGFI = 0.33$; $CFI = 0.58$; $RMSEA = .30$). Therefore, while the original four-factor model (See Table 3) does not have ideal fit statistics, it provides significantly better fit for the data than any of the alternative models. Thus, there is support for the discriminant validity of these four variables.

Individual Outcomes

Finally, a four-factor model of individual outcomes was specified, using a maximum likelihood estimation and item-bundles; however, this model failed to converge. Therefore, I used exploratory factor analysis (EFA) to determine if the individual items loaded on to the appropriate factors. EFA is the optimal analysis

Table 3
Item loadings for breach and deprivation items

Bundle	Item	Factor Loading
<i>Group Psychological Contract Breach</i>		
1	supporting the employees working at this branch so they can attain the highest possible levels of performance.	0.96
	being concerned for the welfare of the employees working at this branch.	
2	being concerned for the long-term well-being of the employees working at this branch.	0.93
	providing the employees working at this branch the support and assistance needed to perform their job.	
	helping the employees working at this branch to respond to ever greater industry standards in reporting, documentation, and so forth.	
3	being responsive to the concerns and well-being of the employees working at this branch.	0.94
	providing rewards (e.g., bonuses) to the employees working at this branch based on the branch's level of performance.	
	providing the employees working at this branch with quality working conditions.	
<i>Individual Psychological Contract Breach</i>		
1	keeping the interests of the employees working at this branch in mind when making decisions.	0.8
	enabling the employees working at this branch to adjust to new, challenging requirements created through regulation.	
	providing the employees working at this branch with the materials and equipment needed to perform the branch's functions.	
2	treating the employees working at this branch fairly and impartially.	0.85
	an attractive benefits package.	
	a good health-care benefits package.	
3	a competitive salary (a salary comparable to that paid by similar organizations).	0.86
	a fair salary (a salary that is reasonable for the job you do).	
	pay commensurate to your level of performance.	
1	rewards (e.g., bonuses) based on your performance.	0.87
	a job that is challenging.	
	a job that is interesting.	
2	a job that provides a high level of autonomy.	0.88
	opportunities to grow and advance within the organization.	
	opportunities for career development.	
3	opportunities to receive promotions.	0.89
	a safe working environment.	
	the resources necessary to perform your job.	
1	the support and assistance needed to perform your job.	0.90
	the opportunity to remain with the organization long-term (i.e. job security).	
	respectful treatment from upper management.	
2	a pleasant work environment.	0.91
	honest and fair treatment from upper management.	
	a job that has high responsibility.	
3	open communication with upper management.	0.92
	Those of us working at the group have really been treated unfairly by the organization.	
	I have the impression that those of us working in this group are worse off in the organization than we should be.	
1	In general, those of us working in this group ought to have a better job situation with (Organization) than we currently have.	0.93
	Those of us working in this group want a better job situation within (Organization) than our current one.	
	Those of us working in this group deserve more from (Organization).	
2	Those of us working in this group deserve more from (Organization).	0.94
	I have really been treated unfairly by the organization.	
	I have the impression that I am worse off in the organization than I should be.	
3	In general, I ought to have a better job situation than my current one.	0.95
	I want a better job situation than my current one.	
	I deserve more from (Organization).	

technique when identifying the underlying factor structure of the variables is the primary purpose of the analysis (Hatcher, 1994). The results of the EFA, using a promax rotation, are shown in Table 4 (see pg. 84). The EFA found four distinct factors among the 17 items. The EFA revealed four distinct factors among the 17 items. Moreover, the factor loadings for each item was greater than .40; in fact, they all

exceeded .60. Likewise, the cross-loadings were all very low; indeed, the highest cross-loading was .22. As such, this analysis indicates that there were four distinct constructs at the individual-level.

To examine the data further I preformed a CFA of a four-factor model, using a maximum likelihood estimation and the individual items. The results ($\chi^2 = 270.35$, $df = 146$; GFI = 0.80; AGFI = 0.75; CFI = 0.85; RMSEA = .09) suggest that this model provide reasonable fit for the data. However, I tested two alternative models to compare the results. A two-factor model in which jobs stress and dysfunctional behavior were specified to load on to a single factor and voice and OCB-O were specified to load onto the other factor. The fit of this two-factor model ($\chi^2 = 649.37$, $df = 151$; GFI = 0.54; AGFI = 0.41; CFI = 0.41; RMSEA = .18) was significantly worse than the fit of the four factor model. I also tested the fit of a one-factor model in which all of the variables loaded onto a single factor. The fit of this model, however, was very poor ($\chi^2 = 829.81$, $df = 152$; GFI = 0.49; AGFI = 0.36; CFI = 0.21; RMSEA = .21) compared to the fit of the four-factor model. Thus, taken together, the results provide some evidence that these variables are distinct.

The next chapter provides a detail description of the analysis of the data. All eight hypotheses are tested, using a combination of regressions and multilevel models. The results for each hypotheses are described, as well as, several post-hoc analysis.

Table 4
Rotated factors and item loadings of individual outcomes

Item	Job Stress	Voice	OCB-O	Dysfunctional Group Behaviors
1 My job is extremely stressful.	0.81	0.01	-0.03	0.05
2 Very few stressful things happen to me at work. (R)	0.68	-0.04	-0.03	0.00
3 I feel a great deal of stress because of my job.	0.90	0.10	-0.02	0.07
4 I almost never feel stressed because of my work.	0.65	-0.20	0.05	-0.08
5 I develop and make recommendations concerning issues that affect employees working at this branch.	0.07	0.81	0.02	0.01
6 I speak up and encourage other employees in this branch to get involved in issues that affect the branch.	0.04	0.77	0.17	0.10
7 I communicate my opinions about work issues to other employees in the branch even if my opinion is different from theirs and they disagree with me.	-0.17	0.62	-0.09	0.09
8 I keep well informed about issues where my opinion might be useful to the employees of this branch.	-0.03	0.80	0.00	-0.17
9 I get involved in issues that affect the quality of work life here at this branch.	-0.07	0.81	-0.03	0.00
10 I speak up in this branch with ideas for new projects or changes in procedures.	0.08	0.75	0.00	-0.08
11 My attendance at work is above the norm.	-0.04	-0.07	1.00	0.08
12 I give advance notice when I am unable to come to work.	0.02	0.22	0.61	0.03
13 The employees working in this group sometimes actively hinder change and compliance with new standards.	0.07	0.13	0.06	0.84
14 The employees working in this group sometimes take aggressive action against new strategies that the organization tries to implement.	-0.04	-0.04	0.00	0.84
15 The employees working in this group sometimes choose to work in isolation from the rest of the organization.	-0.05	-0.07	0.00	0.64
16 The employees working in this group sometimes engage in activities to weaken others at the organization.	-0.02	0.02	-0.11	0.72
17 The employees working in this group sometimes intentionally work slower than they otherwise could.	0.02	-0.05	0.05	0.65

Note: (R) denotes that the item has been reverse scored.

CHAPTER 4

RESULTS

This chapter presents the results of the data analyses. These results are presented in two sections. In the first section, the analysis and subsequent findings for each hypothesis is described. The second section describes several post-hoc tests that were conducted. These analyses were performed in order to better understand the implications of some of the results.

Hypotheses Testing

To test the hypothesized relationships in this study, I used a combination of regression and mixed (or multi-level) models. The group-level hypotheses are tested using multiple regression. These relationships include the antecedents of group psychological contract agreement and the group-level outcomes of group psychological contract breach and fraternal deprivation. To test the relationships between group psychological contract breach and individual psychological contract breach, as well as the relationships among the individual-level variables, I used mixed models, which account for the nested nature of the data (Raudenbush & Bryk, 2002). Specifically, in my data set, individual responses were nested within groups. When analyzing nested data, the independence of errors assumption is violated; therefore, a mixed model should be used in order to correct for the violation of this assumption.

While the individual responses were nested by design, I also sought to determine if there truly was a significant group-level effect. Therefore, using the PROC MIXED procedure in SAS, I tested a null model (i.e., one with no predictors) for the individual-level outcomes of egoistic deprivation ($t = 19.79, p < .001$), job stress ($t = 34.23, p <$

.001), voice ($t = 52.60, p < .001$), OCB-O ($t = 73.24, p < .001$), and dysfunctional group behavior ($t = 22.97, p < .001$). For each model there was evidence of systematic variance in the data. Thus, for both conceptual and empirical reasons, the use of mixed models is both necessary and appropriate for the individual-level analyses in this study.

Antecedents of Group Psychological Contract Agreement

The first two hypotheses focus on the potential antecedents of group psychological contract agreement. The data used to test these two hypotheses was collected at Time 1. The data collection resulted in 33 groups; thus, 33 groups are used as the sample for the tests of the first two hypotheses. The first hypothesis focused on how HRM practices may lead to increased levels of agreement about the group psychological contract. Specifically, this hypothesis predicted that the more consistent the hiring (H1a) and performance appraisal practices (H1b) that are used, the more institutionalized socialization tactics are used (H1c), and the more organizational documents that group members receive (H1d), the higher the level of agreement about the group psychological contract would be. This hypothesis was tested using a multiple regression equation, and the results are shown in Table 5 on page 87. As shown here, H1a ($\beta = 0.71, t = 3.23, p < 0.01$) was fully supported; however, H1b and H1c were not supported. Although the relationship between organizational documents and group psychological contract agreement was significant ($\beta = -0.49, t = -2.05, p < 0.05$), the relationship was in the opposite direction of what was hypothesized direction (i.e., the greater the number of documents, the less agreement there was about the group psychological contract). Therefore, H1d was not supported either.

Table 5

Multiple regression results for group psychological contract agreement

Dependent Variable:		Group Psychological Contract Agreement	
		H1	H2
<i>Independent Variables</i>			<i>Independent Variables</i>
Hiring practices	0.71 **	Group size	-0.26
Appraisal practices	-0.12	Group tenure	-0.23
Socialization tactics	-0.05	Demographic diversity	0.13
Organizational documents	-0.49 *	Personality trait diversity	0.06
		Individualism-collectivism	-0.04

Note: All entries are standardized beta coefficients. * $p < .05$. ** $p < .01$.

The second hypothesis predicted that the group characteristics of group size (H2a), group tenure (H2b), demographic diversity (H2c), personality trait diversity (H2c), and levels of individualism-collectivism within the group (H2e) would influence the level of group psychological contract agreement. However, as show in Table 5, none of these hypotheses were supported.

Group Level Outcomes

The next set of hypotheses is concerned with the relationship between group psychological contract breach, fraternal deprivation, and the group-level outcomes of cohesiveness, conflict, and OCBs directed towards the group. Group psychological contract breach was measured at Time 1, while the other variables were measured at Time 2. Due to a lower response rate at Time 2, these hypotheses were tested with a sample of 29 groups (as are all of the remaining hypotheses). Group size, group tenure, and group demographic diversity were used as control variables in this analysis, and each hypothesis was tested using a multiple regression equation.

Hypothesis 3 predicted that group psychological contract breach would be positively related to feelings of fraternal deprivation. The results support this hypothesis

($\beta = 0.50, t = 2.91, p < 0.01$), indicating that group psychological contract breach is a significant predictor of fraternal deprivation. Hypotheses 4 posited that fraternal deprivation would predict higher levels of cohesiveness (H4a), OCB-group behaviors (H4b), and conflict between the group and the organization (H4c). As shown in Table 6, the results of this analysis indicate that the relationship between fraternal deprivation and cohesiveness is significant and negative ($\beta = -0.44, t = -2.43, p < 0.05$). This is the very opposite of what was predicted by H4a; thus, this hypothesis was not supported. The relationship between fraternal deprivation and OCB-group was non-significant. H4b, then, was not supported either (see Table 6). Finally, H4c was fully supported. That is, fraternal deprivation was positively related to conflict between the group and the organization.

Table 6
Multiple regression results for group-level outcomes

Dependent Variable and Hypotheses	Cohesiveness (H4a)	OCB-group (H4b)	Conflict (H4c)
Control variables			
Group size	0.01	-0.15	-0.09
Group tenure	-0.35 *	-0.39 *	-0.06
Group demographic diversity	0.30	0.28	-0.05
Independent variables			
Fraternal deprivation	-0.44 *	-0.03	0.75 *

Psychological Contract Breach Relationships

The relationship between group psychological contract breach and individual psychological contract breach is the focus of the next two hypotheses. To test these hypotheses, I used a mixed model because the nested nature of the data results in a lack

of independence within the data. This lack of independence must be controlled for by using a mixed model (Raudenbush & Bryk, 2002). In preparation for the use of the mixed model, I group-mean centered (commonly referred to as centering within cluster or CWC) the group psychological contract breach variable. CWC aids in the interpretation of the results from the mixed model, and this procedure is especially appropriate when the relationship in question is at the lowest level of analysis, in this case the individual level (Enders & Tofighi, 2007; Kreft, de Leeuw, & Aiken, 1995). Hypothesis 5 predicted that group psychological contract breach would be positively related to individual psychological contract breach. As shown in Table 7, controlling for gender, age, education level, race, and tenure, the results from the mixed model indicate that group psychological contract breach ($\gamma = 0.65, p < .01$) is a significant predictor of individual psychological contract breach.

Table 7
Mixed model estimates for model of group- and individual-psychological contract breach

Dependent Variable and Hypothesis	Individual psychological contract breach (H5)		
	Coefficient	SE	t
Control Variables			
Gender (γ_{01})	0.08	0.17	0.46
Age (γ_{01})	-0.04	0.04	-1.21
Education level (γ_{01})	-0.02	0.05	-0.04
Race (γ_{01})	-0.05	0.07	-0.65
Tenure (γ_{01})	0.01	0.01	0.84
Independent variable			
Group psychological contract breach	0.65 **	0.07	9.48

Note: * $p < .05$. ** $p < .01$.

The next hypothesis (H6) predicted an interaction between group psychological contract breach and individual perceptions of group psychological contract breach. Individual perceptions of group psychological contract breach was predicted to moderate the relationship between group-level PCB and individual-level PCB such that group members are more likely to perceive individual-level breach when they perceive a group-level breach; group members will be less likely to experience an individual-level breach when they do not perceive a group-level breach of the psychological contract. To provide an unbiased test of this hypothesis, the group psychological contract variable was recalculated to exclude the focal employee. Thus, the hypothesis is tested using the average of group psychological contract breach (excluding the focal individuals rating of the breach), focal employees' ratings of group psychological contract breach, and focal employees' individual psychological contract breach. This hypothesis was not supported, because the interaction term ($\gamma = -0.02$, *n.s.*) was not significant in the equation predicting individual psychological contract breach.

Individual-Level Outcomes

The final two hypotheses focus on the individual-level variables of the research model. Because the individual participants were nested within 29 different groups, a mixed model was used to analyze the data. The individual sample size for these analyses was 124 employees.

Hypothesis 7 posited that higher levels of individual psychological contract breach would be positively related to higher levels of egoistic deprivation. The results of the model, controlling for gender, age, education level, race, and tenure, supported H7 ($\gamma = 0.70$, $p < 0.01$). The final hypothesis (H8), which addresses the relationship

between egoistic deprivation and individual outcomes, has four parts. Specifically, hypothesis 8 predicted that increased feelings of egoistic deprivation would be positively related to voice (H8a), positively related to job stress (H8b), negatively related to OCB-O (H8c), and positively related to dysfunctional group behaviors (H8d). Of these four hypotheses, two were supported. Both H8b and H8d were supported (see Table 8, pg. 92). That is, as expected, egoistic deprivation was positively related to both job stress and dysfunctional group behavior.

Table 9 (see pg. 93) summarizes the results of the tests of my hypotheses. In the next section, several post-hoc tests are conducted to better understand the results and to gain additional insights regarding the underlying constructs.

Post-hoc Analysis

Mediation Tests

In understanding the relationship between variables, it is often helpful to explore the role of mediating variables. Mediating variables are those through which an independent variable influences a dependent variable (Baron & Kenny, 1986; Collins, Graham, & Flaherty, 1998). Baron and Kenny (1986) developed a series of statistical tests that can be conducted in order to determine if the relationship between an independent variable is mediated by a third variable. According to their framework, three criteria must be met for mediation to occur. First, a significant relationship must be established between the independent and dependent variables. Then, a relationship between the independent variable and the mediator must be verified. Finally, both the independent and mediator variables must be entered into a regression equation

Table 8
Mixed model estimates for individual outcomes

Dependent Variable and Hypotheses	Voice (H8a)		Job Stress (H8b)		OCB-O (H8c)		Dysfunctional Group Behaviors (H8d)				
	Coefficient	SE	t	Coefficient	SE	t	Coefficient	SE	t		
Control Variables											
Gender (γ_{01})	0.02	0.23	0.09	0.45	0.32	1.39	-0.34	0.21	-1.61	0.26	0.30
Age (γ_{01})	-0.16 **	0.05	-3.24	0.17 **	0.07	2.47	-0.01	0.05	-0.15	0.06	-1.61
Education level (γ_{01})	0.13 *	0.07	1.73	0.09	0.10	0.88	0.09	0.07	1.41	0.08	-3.04
Race (γ_{01})	0.19 *	0.09	2.01	-0.15	0.13	-1.18	0.18 *	0.08	2.18	0.10	-0.29
Tenure (γ_{01})	0.04 **	0.14	2.81	-0.03 *	0.02	-1.74	0.02 *	0.01	1.90	0.02	2.71
Independent variable											
Egoistic deprivation (γ_{01})	-0.09	0.07	-1.28	0.18 *	0.10	1.76	0.03	0.06	0.51	0.08	2.76

Note: OCB-O = organizational citizenship behavior directed towards the organization. * $p < .05$. ** $p < .01$.

Table 9

Summary of results by hypothesis

	Independent Variable	Dependent Variable	Supported
H1a	Hiring Practices	Group Psychological Contract Agreement	YES
H1b	Performance Appraisal Practices	Group Psychological Contract Agreement	N
H1c	Socialization Tactics	Group Psychological Contract Agreement	N
H1d	Organizational Documentation	Group Psychological Contract Agreement	Significant, opposite direction
H2a	Group Size	Group Psychological Contract Agreement	N
H2b	Group Tenure	Group Psychological Contract Agreement	N
H2c	Demographic Diversity	Group Psychological Contract Agreement	N
H2d	Personality Trait Diversity	Group Psychological Contract Agreement	N
H2e	Individualism-Collectivism	Group Psychological Contract Agreement	N
H3	Group Psychological Contract Breach	Fraternal Deprivation	YES
H4a	Fraternal Deprivation	Cohesiveness	Significant, opposite direction
H4b	Fraternal Deprivation	OCB-Group	N
H4c	Fraternal Deprivation	Conflict	YES
H5	Group Psychological Contract Breach	Individual Psychological Contract Breach	YES
H6	Group Psychological Contract Breach x Individual Perceptions of Group	Individual Psychological Contract Breach	N
H7	Individual Psychological Contract Breach	Egoistic Breach	YES
H8a	Egoistic Breach	Voice	N
H8b	Egoistic Breach	Job Stress	YES
H8c	Egoistic Breach	OCB-O	N
H8d	Egoistic Breach	Dysfunctional Group Behaviors	YES

predicting the dependent variable. If the independent variable loses significance, while the mediator remains significant, it suggests a mediated relationship.

Although not specifically hypothesized, the research model suggests that feelings of deprivation mediate the relationship between both group and individual-level psychological contract breach and the group- and individual-level outcomes (see Figure 2). To determine if these relationships were indeed mediated as implied by the figure, I followed the steps outlined by Baron and Kenny (1986) using linear regression at the group level and a mixed model at the individual level.

Group outcomes. The results, shown in Table 10, illustrate that group psychological contract breach (i.e., the independent variable) is not significantly related to any of the three outcome variables of cohesiveness, OCB-group, and conflict (i.e., the dependent variable); technically, the first of Baron and Kenny's (1986) three criteria

was not met. Recently, however, several researchers (e.g., Collins et al., 1998; MacKinnon, Krull, & Lockwood, 2000; MacKinnon, Lockwood, & Hoffman, 2002; Shrout & Bolger, 2002; Wood, Goodman, Beckmann, & Cook, 2008) have argued that if the dependent variable is theoretically distal from the independent variable, then satisfying this first criteria (i.e., a significant relationship between the independent and dependent variables) may not be necessary.

Morrison and Robinson (1997) argued that breaches may not always lead to outcomes such as feelings of violation. I argue that group psychological contract breach may not be related to these outcome variables because it is an event that leads to an emotional reaction, which in turn leads to the outcomes suggested above. Thus, group psychological contract breach is an event that may or may not influence the attitudes and behaviors of employees, depending on the feelings that result from this breach. Therefore, I argue that group psychological contract breach is an event at the group level, which must lead to feelings of deprivation for the group, before any group-level outcomes will occur. For this reason, I suggest that the group-level outcomes are likely to be distal in this mediation process, and as such, it is appropriate to proceed with the mediation analysis described below.

Table 10
Post-hoc multiple regression results for group psychological contract breach and group-level outcomes

Dependent Variable	Cohesiveness	OCB-group	Conflict
Control variables			
Group size	-0.15	-0.18	0.15
Group tenure	-0.39 *	-0.42 *	-0.02
Group demographic diversity	0.35	0.28	-0.14
Independent variables			
Group PCB	-0.18	0.08	0.38

Note: OCB = organizational citizenship behaviors, PCB = psychological contract breach. * $p < .05$. ** $p < .01$.

Earlier it was established that there is a significant relationship ($\beta = 0.50, t = 2.91, p < 0.01$) between group psychological contract breach and fraternal deprivation (consistent with hypothesis 3). The final step, then, is to examine enter both group psychological contract breach and fraternal deprivation into the regression. As shown in Table 11, in the regressions predicting cohesiveness and conflict, group psychological contract is not significant ($\beta = 0.05, t = 0.26, n.s.$, and $\beta = 0.01, t = 0.02, n.s.$ respectively), while fraternal deprivation ($\beta = -0.47, t = -2.18, p < 0.05$, and $\beta = 0.75, t = 3.93, p < 0.01$. respectively) remains significant. These findings support the idea that fraternal deprivation mediates the relationship between group psychological contract breach and the group-level outcomes of cohesiveness and conflict.

Table 11
Mediation test results for group-level outcomes

Dependent Variable	Cohesiveness	OCB-group	Conflict
Control variables			
Group size	0.01	-0.15	-0.09
Group tenure	-0.37 *	-0.42 *	-0.06
Group demographic diversity	0.30	0.27	-0.05
Independent variables			
Group PCB	0.05	0.13	0.01
Mediator			
Fraternal deprivation	-0.47 *	-0.10	0.75 *

Note: OCB = organizational citizenship behaviors, PCB = psychological contract breach. * $p < .05$. ** $p < .01$.

To further verify the results of this mediation analysis, I conducted a Sobel test to assess the indirect effect of independent variable on the dependent variable (Sobel, 1982). This was done for the outcomes of cohesiveness and conflict. The results of the Sobel test for cohesiveness suggests that there is not a significant indirect path ($z = 0.21, n.s.$). However, the results of the Sobel test for conflict indicate that there is a significant indirect path ($z = 0.44, p < 0.01$). Because the Sobel test is subject to

problems when the distribution of the data is not symmetrical, especially in small samples (Bollen & Stine, 1990), I chose to further supplement this analysis by bootstrapping the sampling distribution and deriving the confidence interval. Following procedures suggested by Preacher and Hayes (2004), I computed bootstrap estimates of 90% confidence intervals from the conventional regression analysis of the raw data. The confidence interval for cohesiveness places the lower limit at -0.38 and the upper limit at -0.01. The results for conflict place the lower limit of the confidence interval at 0.03 and the upper limit at 0.89. Because both confidence intervals exclude zero, it can be concluded that the indirect effect is significant. Overall, these findings indicate that fraternal deprivation does mediate the relationship between group psychological contract breach and the group-level outcomes of cohesiveness and conflict.

Individual outcomes. To test for mediation of individual outcomes, I used mixed models to examine the direct effects of individual psychological contract breach on employee job attitudes and behaviors. The results, which are shown in Table 12 (on pg. 97), indicate that, of the four individual-level outcome variables, individual psychological contract breach is only significantly related to dysfunctional group behaviors ($\gamma = 0.22, p < 0.05$). Because individual psychological contract breach has been linked to several individual outcomes (For a full review see Zhao et al., 2007), and specifically to OCBs (Turnley et al., 2003), it seems less reasonable to make an argument for distal mediation in this case. Therefore, I only examined the indirect effect of individual psychological contract breach and egoistic deprivation on group dysfunctional behaviors.

Table 12
Meditation tests for individual outcomes

Dependent Variable	Voice		Job Stress		OCB-O		Dysfunctional Group Behaviors					
	Coefficient	SE	t	Coefficient	SE	t	Coefficient	SE	t			
Control Variables												
Gender (γ_{01})	0.01	0.22	0.05	0.40	0.32	1.26	-0.24	0.20	-1.21	0.15	0.26	0.58
Age (γ_{01})	-0.15 **	0.05	-3.30	0.14 *	0.07	2.00	-0.02	0.04	-0.49	-0.12 *	0.06	-2.18
Education level (γ_{01})	0.12 *	0.07	1.69	0.09	0.10	0.89	0.11 *	0.06	1.69	-0.23 **	0.08	-2.79
Race (γ_{01})	0.14 *	0.09	1.63	-0.11	0.12	-0.84	0.19 **	0.08	2.37	-0.03	0.10	-0.25
Tenure (γ_{01})	0.04 **	0.01	2.89	-0.04 *	0.20	-1.78	0.02 *	0.01	1.97	0.04 **	0.02	2.60
Independent variable												
Individual PCB (γ_{01})	-0.15	0.11	-1.44	0.16	0.15	1.08	-0.05	0.09	-0.50	0.22 *	0.12	1.89

Note: OCB-O = organizational citizenship behavior directed towards the organization, PCB = psychological contract breach. * $p < .05$. ** $p < .01$.

As indicated in the earlier analysis, the first criteria of the Baron and Kenny (1986) framework was satisfied. Earlier, it was also found (in the test of H7) that there is a significant relationship between individual psychological contract breach and egoistic deprivation ($\gamma = 0.24, p < 0.05$). Thus, using the Baron and Kenny (1986) framework, the final step for mediation is for both the independent and mediator variables to be entered into the equation. The results of this model (see Table 13) indicate that individual psychological contract breach ($\gamma = 0.12, n.s.$) is no longer significant, while egoistic deprivation ($\gamma = 0.20, p < .01$) remains significant. Thus, these findings suggest that egoistic deprivation mediates the relationship between individual psychological contract breach and egoistic deprivation.

Table 13
Mediation tests for dysfunctional behaviors

Dependent Variable	Dysfunctional Group Behaviors (Step One)			Egoistic Deprivation (Step Two)			Dysfunctional Group Behaviors (Step Three)		
	Coefficient	SE	t	Coefficient	SE	t	Coefficient	SE	t
Control Variables									
Gender (γ_{01})	-0.13	0.22	-0.60	0.16	0.29	0.55	-0.14	0.22	-0.62
Age (γ_{01})	-0.07	0.05	1.58	-0.13 *	0.06	-2.11	-0.06	0.05	-0.98
Education level (γ_{01})	-0.16 *	0.07	-2.33	0.04	0.09	0.41	-0.16 *	0.07	-2.39
Race (γ_{01})	-0.03	0.09	-0.36	0.24 *	0.11	2.16	-0.07	0.09	-0.80
Tenure (γ_{01})	0.02	0.01	1.63	0.01	0.02	0.44	0.02	0.01	1.59
Independent variable									
Individual PCB (γ_{01})	0.24 *	0.10	2.34	0.70 **	0.13	5.29	0.12	0.11	1.06
Mediator variable									
Egoistic Deprivation (γ_{01})							0.20 **	0.08	2.62

Note: PCB = psychological contract breach. * $p < .05$. ** $p < .01$.

Psychological Contract Dimensions

The psychological contract is a multi-dimensional construct that often encompasses promises about compensation, performance-based rewards, job characteristics, advancement opportunities, resources, and the employment relationship

(Robinson & Morrison, 1995b; Turnley et al., 2003). The Robinson and Morrison (1995b) scale, which captures these six dimensions, consists of 21 items, however, only 12 items were used to measure the group psychological contract. These items were drawn from this and one other previously developed measure (Rousseau, 2000). In addition to referent shifts to the group level, some items were slightly reworded in order to more clearly capture the group nature of the construct. Although it is unlikely that all six dimensions exist within the somewhat abbreviated measure of the group psychological contract used in this study, it is possible that there are multiple dimensions captured by this instrument.

The findings of prior studies suggest that breaches of certain dimensions of the psychological contract may differentially predict the same outcome. For instance, in a study by Turnley and colleagues (2003), the psychological contract dimensions of pay and employment relationship each had unique relationships with different types of OCB. Therefore, to gain deeper insights into the different aspects of the group psychological contract and their potential effects, I performed an EFA of the group psychological contract items to identify their underlying factor structure.

In examining the group psychological contract items, I used maximum-likelihood estimation and a promax rotation (because the different group psychological contract dimensions are likely to be correlated). As is commonly recommended, items that had high cross-loadings (i.e., greater than 0.35) and those that did not have factor loadings of at least 0.40 were deleted from the scale (see Hinkin, 1995). Four items were eliminated through this process. The remaining eight items were factor analyzed again using the same process. One additional item was eliminated because of high

cross-loadings, and the process was repeated one final time. The results of this final EFA are depicted in Table 14.

As shown in Table 14, the factor structure is relatively clean—the highest cross-loading is 0.32, and all of the other cross-loadings were 0.22 or less. A two-factor solution was revealed by the EFA. Factor 1 appears to capture the support and resources that the organization will provide the group, while factor 2 addresses the treatment of the group by the organization. The four items that comprise Factor 1 are based on some items from Robinson and Morrison’s (1995b) resources scale; for this reason, I refer to this as the Resources factor. The other factor is composed of items that Rousseau (2000) used to capture the relational elements of the psychological contract; therefore, I call this the Group Relations factor.

Table 14
Rotated factors and item loadings of group psychological contract items

Item	Factor 1	Factor 2
Please indicate your level of agreement with the following statements about promises made between (organization name) and your group (e.g., branch or team). “(Organization name) has promised us...”		
1 to help the employees working at this branch respond to ever greater industry standards in reporting and documentation.	0.77	0.22
2 to enable the employees working at this branch to adjust to new and challenging requirements created through regulation.	0.91	0.04
3 to provide the employees working at this branch with the materials and equipment needed to perform the branch’s functions.	0.67	0.08
4 to provide the employees working at this branch the support and assistance they need to perform their job.	0.58	0.32
5 to be concerned for the welfare of the employees working at this branch.	0.16	0.84
6 to be responsive to the concerns and well being of the employees working at this branch.	0.11	0.84
7 to be concerned for the long-term well-being of the employees working at this branch.	0.15	0.83

Next, I computed the Cronbach's alphas for both factors, and the results for both the Resources ($\alpha = 0.93$) and Group Relations ($\alpha = 0.96$) factors indicate acceptable levels of internal reliability. The data were then aggregated, and I specified three regression equations per factor, specifying each of the group outcomes (i.e., cohesiveness, OCB-group, and conflict). Of these six regression equations, only one had a significant result. Specifically, when broken down into two factors, only breach of the group psychological contract dimension of group relations ($\beta = -0.37$, $t = 1.77$, $p < 0.05$) significantly predicted conflict between the group and the organization. Based on these results, I believe that the original measure of group psychological contract breach is more predictive of group behaviors than individual dimensions of group psychological contract breach are.

To further examine the data, a CFA was performed on the individual psychological contract breach scale to see if the six dimensions described by previous research (e.g., Robinson & Morrison, 1995b; Turnley et al., 2003) were evident in this data—namely, compensation, performance-based rewards, job characteristics, advancement opportunities, resources, and employment relationship. The original factors were specified in a six-factor model. The results suggest that the model is not the best fit of the data ($\chi^2 = 706.25$, $df = 174$; GFI = 0.67; AGFI = 0.56; CFI = 0.79; RMSEA = .16); however, each of the items did load significantly on to its designated factor. This six-factor model was compared with two alternative models in order to determine if another model would be a better fit for the data and to provide some assessment of discriminant validity. The first alternative model was a three-factor model that collapsed the six dimensions into three larger factors. Specifically, the

compensation dimension was combined with the performance-based rewards dimension, the job characteristics dimension was combined with the advancement opportunities dimension, and the resources and employment relationship dimensions were combined to form the final dimension.

This three-factor model fit the data significantly worse ($\chi^2 = 1273.85$, $df = 186$; $GFI = 0.46$; $AGFI = 0.33$; $CFI = 0.60$; $RMSEA = .23$) than the six-factor model. The second model was a one-factor model that also yielded extremely poor fit statistics ($\chi^2 = 1821.10$, $df = 210$; $GFI = 0.38$; $AGFI = 0.24$; $CFI = 0.41$; $RMSEA = .27$). Therefore, while the original six-factor model does not have ideal fit statistics, it clearly provides a better fit for the data than either of the alternative models. To this degree, there is support for the discriminant validity for the original six dimensions.

Next, I computed the Cronbach's alphas for each of the six dimensions. Each of the alphas indicates acceptable levels of internal consistency: compensation ($\alpha = 0.90$), performance-based rewards ($\alpha = 0.90$), job characteristics ($\alpha = 0.92$), advancement opportunities ($\alpha = 0.98$), resources ($\alpha = 0.89$), and employment relationship ($\alpha = 0.91$). I then examined the relationship of these six dimensions with the individual-level outcome of dysfunctional group behaviors. The results show that four of the six psychological contract dimensions predicted group dysfunctional behaviors. The dimensions were compensation ($\gamma = 0.17$, $p < 0.05$), job characteristics ($\gamma = 0.22$, $p < 0.01$), advancement opportunities ($\gamma = 0.12$, $p < 0.05$), and employee relationship ($\gamma = 0.20$, $p < 0.01$). Thus, some of the dimensions are predictive of this outcome, but others are not.

Supervisor Data

Although the response from the supervisors of the groups was not large enough to use the supervisor data in the analyses, I examined the correlations between group-level outcomes and other group-level constructs to assess these relationships using supervisor ratings cohesiveness, OCB-group, and conflict. The relationship between fraternal deprivation and OCB-group was not statistically significant ($r = 0.22$); however, it should be noted that the relationship is in the predicted direction. Although there was no prediction made about the relationship between psychological contract breach and OCB-group in this study, it is interesting to note that this relationship is actually negative and non-significant ($r = -0.18$). The same pattern emerges with regard to the outcome of conflict. Specifically, while the correlation between supervisor ratings of conflict (between the group and the organization) and fraternal deprivation is in the predicted direction ($r = 0.20$), the correlation between supervisor ratings of conflict and group psychological contract breach is in the opposite direction ($r = -0.26$) (again, though, neither of these correlations is statistically significant). The correlation between supervisor ratings of cohesiveness and group psychological contract breach ($r = 0.02$) was close to zero, and the relationship between supervisor ratings of cohesiveness and fraternal deprivation was weak as well ($r = -0.12$). Although the negative correlation between supervisor ratings of cohesiveness and fraternal deprivation is the opposite of what was hypothesized (see H4a), this finding is actually consistent with the results that were found using employee ratings of cohesiveness and fraternal deprivation.

Qualitative Data

In the final section of the questionnaire, respondents were asked for their general comments about the extent to which the organization had fulfilled its commitments to them. Of the 214 participants in the first survey, only 27 of them left comments. An inspection of these comments found that roughly half of them noted how the employer had done an excellent job in living up to the commitments it made to them.

Representative comments from this group include:

“(Organization Name) has never failed to keep a commitment to me”

“(Organization Name) has been an amazing employer. I have zero complaints.”

“Never failed, always stayed to their word.”

The other comments focused on a mix of individual-level breaches and group-level breaches of the psychological contract. The employees that focused on the promises made to their group mentioned the lack of support they felt their group received from upper management. For instance, some employees noted that the group is always short staffed, even at a time when there are many applicants. A few other employees mentioned the strained relationship their group has with management.

Sample comments include:

“They keep our bank staffed so we are short all the time.”

“The bank has become consumed with sales driven policies and procedures and have lost the care and concern for their employees... They fail to recognize that all branches operate differently.”

“Upper management is not easy to go to for questions but my department is one that requires management support every day.”

At the individual level, employees mentioned promises about benefits, career opportunities, and flexible schedules that had not been fulfilled. Some representative comments from this group include:

“(Organization Name) offered tuition assistance when I was hired, after taking 7 courses courtesy of the bank, they pulled the program with no notice.”

“I was promised a Saturday off each month. I only get them when I ask for a specific date months in advance. If I don’t I am scheduled for a full shift every week.”

The implications of these findings for future work, both theoretical and empirical, on the group psychological contract, group-level research issues, and management practices are discussed in the next and final chapter.

CHAPTER 5

DISCUSSION AND CONCLUSION

In this final chapter, I discuss the results of the data analyses and outline some directions for future research. The first section of this chapter briefly highlights the contributions of this dissertation to our understanding of psychological contracts at the group level. The second section focuses on the theoretical development of the group psychological contract and then discusses several avenues for future research. In this section, I address some of the unique multilevel theory issues faced by researchers seeking to investigate the group psychological contract, and other similar constructs. The next section focuses on the methodology of this study. In particular, the strengths and limitations of this research are described, along with suggestions for designing future studies that might examine these questions more rigorously. The final section of this chapter briefly addresses the practical implications of this study for management practice.

Contributions of Present Research

This dissertation makes several different contributions to the psychological contract literature. First and foremost, this dissertation contributes importantly to the psychological contract literature by developing the construct of the group psychological contract. Prior to this dissertation, research has focused on the psychological contracts of individuals (see Raja et al., 2004; Robinson, 1996; Robinson & Morrison, 1995a; Rousseau, 1995). Thus, the proposal that psychological contracts also exist at the group level is both novel and important. Specifically, the findings of this study not only indicate that groups have psychological contracts, but also that groups vary in the

degree to which they agree about the psychological contract and experience group psychological contract breach. Additionally, the CFAs provided some evidence of the validity of the existence of the group's psychological contract, the group psychological contract breach variable had good r_{wg} and ICC(1) values, and group psychological contract breach was a significant predictor of the group's feelings of fraternal deprivation.

The group psychological contract represents a significant change in the typical way that psychological contracts have been viewed. This is important because the work environment has changed over the past few decades (Cascio, 1995; Hom, Roberson, & Ellis, 2008; Sullivan, 1999), and with this shift, there has been an increase in the number of work groups and teams used by organizations (Cohen & Bailey, 1997). Because of this shift, it is important to understand that groups of employees can develop a psychological contract that reflects what they perceive that they have been promised as a collective and, that if these promises are unfulfilled, that there are implications for groups, as well as, individual employees.

Second, this study examined several potential antecedents of the group psychological contract. This was done in the context of predicting agreement about the group psychological contract. Previous research in the area of psychological contracts has focused almost exclusively on the outcomes of breach and violation (see Zhao et al., 2007). Although outcomes of group psychological contract breach are studied in this dissertation, it makes a contribution by also seeking to understand how HRM practices and group composition may influence agreement about the group psychological contract. While not all of the hypothesized antecedents were significant predictors of

group psychological contract agreement, two HR practices did predict agreement about the group psychological contract. Researchers may be able to build upon these findings, then, in order to develop a better understanding of what influences the creation of the psychological contract, at both the individual and group levels. In particular, the one HR practice that was significant in the hypothesized direction was the hiring practices variable. This variable captured the consistency of the organization's hiring practices and was hypothesized to lead to greater agreement about the group psychological contract because consistent hiring practices should mean that group members are more likely to receive the same promises. However, the hiring practices of an organization may influence the psychological contracts of groups and individuals in other ways, such as the actual recruitment materials that outline what future employees can anticipate that their employer will provide.

The second finding, that an increased number of organizational documents leads to a decrease in the level of agreement about the group psychological contract, presents a finding counter to the hypothesis. It may be that organizations that use a large number of documents to communicate with employees leave more things open to the interpretation of individual employees. Thus, some employees may focus in on different aspects of the documents than other employees. This may lead them to believe that different things are part of the group psychological contract, and as a result, there may be lower levels of agreement about the contract. Future work in this area may help organizations to better understand how HR processes that take place during an employee's entry into the organization may influence the formation of the psychological contract in important ways.

Third, this dissertation identified one key outcome of group psychological contract breach—namely, fraternal deprivation. Because feelings of fraternal deprivation have been linked to several negative consequences (Crosby, 1976, 1984; Martin, 1981), it is particularly important to understand that groups are likely to feel relatively deprived when their organizations fail to fulfill the promises and obligations they have made to the group. Additionally, in this study, I found these feelings of relative deprivation were associated with decreased levels of group cohesion and increased levels of conflict between the group and the organization.

The fourth and final contribution of this research is that feelings of deprivation were identified as a mediator between psychological contract breach and job attitudes and behaviors. In previous psychological contract research, unmet expectations and trust have been identified as mediators of the breach-outcome relationship (Robinson, 1996), but relative deprivation has never been examined in the same context. The focus of relative deprivation theory on the comparisons that individuals make between their actual rewards and the rewards of a referent (either an actual referent or an ideal standard) (Crosby, 1976; Martin, 1981), makes this an especially good theory for explaining the process of and the reactions that result from psychological contract breach. In other words, because psychological contract breach occurs when workers notice that promises are unfulfilled (Morrison & Robinson, 1997), relative deprivation theory's explanation of the comparison that individuals make between their actual rewards or circumstances and the promised ideal provides a particularly relevant framework for psychological contract research. Moreover, using relative deprivation theory should prove useful for future research examining the effects of psychological

contract breach, and the findings that feelings of deprivation act as a mediator likewise provide a finding for future investigations.

Theoretical Research Considerations

When Rousseau (1989) reconceptualized the psychological contract in her seminal article, she provided a framework for conceptualizing the employment relationships that has been used for the following two decades. Indeed, the psychological contract has been of interest to more than just researchers. The concept has been integrated into the curriculum of business students through its inclusion in textbooks (see Carpenter, Bauer, & Erdogan, 2009; McShane & Von Glinow, 2010) and introduced to an even wider audience through practitioner-oriented books (see George, 2009). Thus, the psychological contract, with its emphasis on mutual promises and obligations, has become a firmly-entrenched lens through which many view the employment relationship. As such, it is important to consider this framework in conjunction with the steady change of the work environment. In particular, owing to the increased use of groups and teams in contemporary organizations over the past decade (Cohen & Bailey, 1997), it is important to consider the implication of these changes in the workplace with regard to the psychological contract. This dissertation has sought to address the theoretical question: “Can groups can have a psychological contract?” In the following section, I discuss the potential theoretical considerations for the group psychological contract and revisit the original two models presented in chapter 1. Moreover, I offer some suggestions for future research based on both the theoretical issues addressed in my dissertation and the empirical findings of the study.

Theorizing at the Group Level

While there was some support for the hypotheses advanced in this dissertation, there were several unsupported hypotheses as well. This is especially true of the group psychological contract antecedents. Additionally, post-hoc analyses indicate that there is no direct relationship between group psychological contract breach and the group-level outcomes. Theorizing at the group level, especially when moving existing individual-level constructs up to the group level, is clearly complicated. In chapter 1, I argued that, based on Morgeson and Hoffmann's (1999) guidelines, it was appropriate to move the psychological contract to the group level. However, in addition to these guidelines there are other issues that researchers must consider when theorizing at the group level.

Kozlowski and Klein (2000) argue that understanding the process by which individual-level constructs emerge at a higher level is critical for understanding these types of phenomena. Emergence occurs when a phenomenon "originates in the cognitions, affect, behaviors, or other characteristics of individuals" (Kozlowski & Klein, 2000, p. 55), is then augmented by the interactions of these individuals, and finally exists at a higher level (Allport, 1954; Katz & Kahn, 1966). This emergence process occurs in one of two basic ways: composition or compilation. Much of the multilevel literature is composition based (Kozlowski & Klein, 2000), and has relied on isomorphic composition models when theorizing about constructs at higher levels (House, Rousseau, & Thomas-Hunt, 1995; Rousseau, 1985). Compositional models of group constructs rely on the individual-level construct aggregating in a uniform way, which causes the group-level construct to exhibit all of the same characteristics and

processes as the individual-level construct (Kozlowski & Klein, 2000). Using this type of process, a group-level construct is expected to exhibit and function in virtually an identical manner to the individual-level construct upon which it is based. It occurs when all of the lower-level phenomena converge to produce the group-level construct, with the group-level properties being essentially the same as the individual level properties (Yuan, Fulk, Monge & Contractor, 2010). The isomorphic emergence model is a powerful conceptual model, but it is only one possible way for constructs to emerge (Kozlowski & Klein, 2000).

The second way that a higher-level phenomenon can emerge is through the process of compilation. Compilation models do not propose that a higher-level construct must be an exact reflection of the lower-level construct. Indeed the properties of compilation models are not always uniform, shared, or convergent (Kozlowski & Klein, 2000). The compilation emergence process is based in the idea that organizational forces such as the attraction, selection, attrition framework (Schneider, 1987), socialization (Feldman, 1976, 1981), and other similar processes do not always eliminate every unique characteristic of an employee. Thus, when higher-level constructs emerge, they have some unique properties. In addition to this, some employee characteristics automatically create diversity (i.e., demographic characteristics such as race and gender), and these differences cannot be eliminated. Thus, various individual differences and characteristics will always exist in an organization, and, as a result, the interactions between group members may reflect some of these unique personal characteristics, as well as distinctive environmental properties. When group-level phenomenon emerge they are often unique and not necessarily just

the sum of the individual-level phenomenon; as such, they are not always an exact reflection of the individual-level construct (Kozlowski & Klein, 2000) and, in some cases, have unique antecedents and properties (Yuan et al., 2010).

The conceptual differences between composition and compilation emergent processes are vividly illustrated in a cycling example provided by Brown and Eisenhardt (1998). The outcome of a team's performance in a cycling race (winning the race) can be relatively compositional if it is a relay race, wherein performance is a reflection of the average of individual performances, with the team that has the fastest average individual performance winning the race. However, in a race like the Tour de France, where teammates must protect the leader from the wind, draft off of one another, as well as, "muscle and block to protect teammates from passing moves by competitors" (p. 62), team performance is relatively more compilational. In this situation, the outcome of team performance (winning the race) requires each cyclist to provide unique contributions the group and winning the race depends more upon the unique contributions each individual member can make, rather than the averages of their performances.

Based on the findings of this dissertation, I would now propose that the group psychological contract and breach of the group psychological contract are most likely to emerge through the process of compilation (i.e., rather than composition). This has important implications for the potential antecedents, outcomes, and processes that are related to the group psychological contract. It is likely that the group psychological contract will share some of the same characteristics as the individual psychological contract, but the findings of this dissertation suggest that there are likely to be key

differences at the group level, in how psychological contracts develop within groups, and the consequences of group psychological contract breach.

The models of the antecedents of group psychological contract agreement and the outcomes of group psychological contract breach proposed in this dissertation (see Figures 1 and 2), were based principally on an isomorphic compositional emergence process. In retrospect, though, a compilational emergence process may be equally relevant. In the next two sections, therefore, I will discuss each of these models and provide suggestions for improving them in light of my findings. I will first address the models using the compositional assumptions upon which I originally based my arguments. I will then describe the applicability of compilational assumptions and discuss how these types of assumptions may warrant greater consideration in future investigations of group psychological contracts.

Antecedents of Group Psychological Contract Agreement

As described earlier, the psychological contract is composed of the promises and obligations that employees feel their employer has made to them (Rousseau, 1995); accordingly, if a group were to have a psychological contract, the group members would need to agree, at least to some degree, about the promises and obligations that had been made to the group. To capture this agreement, I used the r_{wg} score of the group psychological contract items. Because r_{wg} scores reflect levels of within-group agreement on a set of items (James et al., 1984; LeBreton et al., 2005), this was the most appropriate way to measure the agreement among group members.

The r_{wg} scores for the 33 groups examined ranged from 0.92 to 0.99. While this variance may seem small, a random-effects mixed model (null model) confirms that

there are significant differences among the groups with regard to group psychological contact agreement ($t = 50.74, p < 0.001$). Thus, there were significantly different levels of agreement about the promises made to the groups in this sample of employees. Originally, I predicted that these differences were the result of HR practices and different group composition characteristics. These hypotheses were based on a compositional emergence process that suggested the group-level psychological contract would develop in a similar manner to the individual-level psychological contract. However, the results of this study found that only two HR practices had a significant effect on the outcome, and none of the group composition variables was a significant predictor.

The two HR practices that were significant predictors were hiring practices and organizational documents. Each of these HR practices was mentioned by Rousseau and Greller (1994) as potential “contract makers” that could shape the promises that employees perceived to be a part of their psychological contract. In this study, hiring practices were operationalized in a way that captured the consistency of the hiring practices across employees. When organizations use consistent hiring practices and explain the mutual promises and obligations between the organization and the employee in similar way, it results in each employee having similar views of these promises and obligations. When individuals are hired into a group setting, it is therefore logical that this should increase overall group agreement about the promises and obligations the organization has made to the group. In order to build upon this finding, future work might focus on the explicitness of the promises made during the hiring process. If the individuals who actually hire employees tend to make implicit promises during the

recruitment processes, it increases the likelihood that some employees will notice the promises, while others will not.

In the original model, I hypothesized that group members who were exposed to the same organizational documents would be more likely to agree on the group psychological contract. The results (see Table 5), however, indicate that the opposite is true; the more documents employees received and the more policies that the organization has, the less agreement there was about the group psychological contract. The operationalization of this antecedent focused on the quantity of documents that the organization distributed to its employees. But it is possible that, rather than helping to create a consensus among employees about the promises and obligations that exist between the organization and the group, a large quantity of documents may actually create greater confusion among employees. For instance, a larger number of organizational documents could create increased opportunities for individual interpretation regarding an organization's obligations. As a result, employees may develop different ideas about the promises and obligations that exist between the group and the organization.

When Rousseau and Greller (1994) proposed that organizational documents might contribute to the formation of the psychological contract, they argued that the personnel manual is most likely to be the source of information about promises, job requirements, and performance expectations. Moreover, they pointed out that the personnel manual is a reference for employees about the conditions of employment that can be consulted at any time. Because organizations are unlikely to create a personnel manual for specific groups, higher levels of organizational documentation may be

inversely associated with agreement about the group psychological contract because it results in multiple interpretations by group members. In future research it would be useful to focus on group-specific documentations that may be used organizations. For instance, depending on the type of group, a bank branch versus a project team for a design firm, there may be documents specific to the group that do influence the level of agreement about the group psychological contract.

Moving away from these isomorphic assumptions and recognizing that the group psychological contract may emerge through a compilation process, there are other possible antecedents that researchers should consider in future studies. In particular, when theorizing about the possible antecedents of group psychological contract agreement, I drew upon earlier work that had discussed how the individual psychological contract might form. In extending the psychological contract to the group level, I focused on those elements that would create agreement among group members, rather than considering all of the various factors and processes that might influence interactions among group members and their views of the organization's promises and obligations. This is especially evident in the socialization tactics that were examined in this study. Specifically, the tactics measured in this study are ones that are formal and happen in a set sequence. Accordingly, rather than focusing solely on variables that are likely to lead to greater similarities in the views of group members, I recommend that researchers give greater consideration in future work to variables that are likely to account for differences between group members as well.

Drawing from the compilation model, there are additional antecedents of the group psychological contract that are worth exploring as well. In particular, mental

models are individuals' mental representations of systems and how they work (Johnson-Laird, 1983; Rouse & Morris, 1986). Mental models contain a variety of information, such as factual knowledge that group members have about the properties of a system, beliefs of group members about the cause and effect relationships within a system, and the assumptions group members have about the relevant variables within a system (Huber & Lewis, 2010). Prior work has acknowledged that the existence of mental models at the group level (i.e., group mental models) does not necessarily mean that all group members view things in an identical fashion, but rather that their views are somewhat compatible. Indeed, even at the group level there are likely to be differences in mental models based on tasks, roles, and other unique factors that lead to variance in the mental models of individual employees (Kozlowiski & Klein, 2000). Differences in the mental models that group members have about group psychological contracts may influence what they consider to be part of it, as well as what they believe constitutes a breach of the group psychological contract. One future direction for group psychological contract research, therefore, is the exploration of group mental models and their role in psychological contract formation and the assessment of breach. Such research may be most fruitful when it focuses on the assumptions that workers have about the relationships between promises, obligations, and performance in the workplace.

Situational forces in an organization may influence the nature of the interaction process that creates higher-order constructs, thereby resulting in less similarity and more differences and making the emergence of the higher order phenomenon more likely to occur through a compilational process (Kozlowski & Klein, 2000). In

particular, this perspective suggests at least two situational characteristics that could influence differences among group members' views of the group psychological contract. Justice climate is a group-level cognition about how the group is treated, and it is a function of group members' individual justice perceptions (Naumann & Bennett, 2000). Individual experiences with supervisors, employees in other groups, or even coworkers may influence the justice climate of the organization and the group. This may affect the way that employees view the group psychological contract and the promises and obligations that employees perceive to be a part of it. For instance, disagreements between a group member and a supervisor, or a member of another group, may negatively influence the justice climate of the organization, thereby changing the way that some group members feel about the promises and obligations that make up the group psychological contract.

Another situational characteristic that may influence the group psychological contract is task interdependence, or the degree to which employees rely on one another for materials, information, and other resources to complete their jobs (Gibson, 1999; Wageman, 1995). Drawing upon the same social information processing theory (Salancik & Pfeffer, 1978) argument described in chapter 1, it is likely that task interdependence will influence agreement about the group psychological contract because the more interdependent job tasks are, the more employees will rely on one another, and the more time they will spend together. Group members whose work is particularly interdependent should be especially prone to seeing the group psychological contract similarly. Conversely, it is possible for employees to work in a group, but have low task interdependence, which should greatly reduce the amount of interaction among

the employees, making it less likely that agreement about the group psychological contract will emerge. Thus, the level of task interdependence within a group may have important implications for the group psychological contract.

Although it is important to consider these types of compilational processes, future work should continue to consider compositional forces that tend to result in greater uniformity in the views of group members. One potential antecedent that merits investigating from a compositional perspective is identification. An individual's identification with an organization or, in this case, with the group, can be considered a cognitive connection between the group and the self that is part of the individual's self-concept (Dutton, Dukerich, & Harquail, 1994). Accordingly, those individuals who strongly identify with the group should be more likely to perceive that there is a group psychological contract and to agree with their group members about the content of it. Therefore, future investigations of the group psychological contract should not only consider the potential antecedents of the individual psychological contract (e.g., Parks & Schmedemann, 1994; Pate, 2005; Rousseau & Greller, 1994) as was done in this dissertation, but also examine the individual and situational factors that may lead to a compilational emergence process. Similarly, other antecedents that might be more consistent with a compositional emergence process warrant additional research attention as well.

Outcomes of Group Psychological Contract Breach

The second model (see Figure 2, pg. 26) presented in chapter 1 focused on group psychological contract breach and several potential outcomes. The findings at the group level indicate that group psychological contract breach is associated with fraternal

deprivation, which mediates the relationship between group psychological contract breach and the outcomes of cohesiveness and conflict. At the individual level, psychological contract breach is often directly linked to job attitudes and behavior (e.g., Payne et al., 2008; Robinson & Morrison, 1995a; Rousseau, 1990; Turnley et al., 2003; Turnley & Feldman, 2000), however, the results of this study suggest that the process through which psychological contract breach affects outcomes may be different at the group level than at the individual level.

Discontinuity, irregular interaction processes, and nonlinear combinations characterize group-level constructs that emerge through compilation (Kozlowski & Klein, 2000). Thus, the process by which group psychological contract breach leads to a collective response might be different from the process that occurs at the individual level. Furthermore, it is possible that this process may be unique to each group. In their model of psychological contract breach and violation, Morrison and Robinson (1997) suggested that even after employees perceive that promises have not been fulfilled feelings of violation are not automatic. Instead, they propose that an employee's mood or equity sensitivity, the importance of the outcome that has not been fulfilled, and fairness judgments, among other factors, are all likely to play a role in whether or not the employee experiences violation after he or she perceives that a promise has not been fulfilled. Their theoretical model suggests that there may be group processes of comparison, emotional reactions, and other types of interactions that must occur following group psychological contract breach before there will be a change in the group's attitudes or behaviors. While the Morrison and Robinson (1997) model

provides a foundation for understanding how these variables may interrelate, it is unlikely that the group-level process will mirror it precisely.

In particular, because multiple individuals are involved in the group context, the processing of unfulfilled promises and obligations may take more time. Accordingly, group psychological contract breach is likely to be much more distal from attitudinal and behavioral outcomes (i.e., than in situations of individual psychological contract breach). Group members must not only collectively agree that there was a breach of the group contract, but the group must also agree that this breach is severe enough to warrant a group response. Thus, it is likely that there is process that groups go through following a group psychological contract breach, but prior to a group-level reaction to that breach. In essence, the group must collectively agree to respond to the breach. In other words, there may be a collective acknowledgement of group psychological contract breach, but this may not necessarily lead to collective action or changes in the collective attitude of the group.

Feelings of fraternal deprivation represent one reaction through which the breach leads to a group-level reaction. Specifically, when groups experience fraternal deprivation, their feelings of wanting and entitlement are likely to lead to a collective response. In this study, there were decreased levels of cohesiveness and elevated levels of conflict between the group and the organization as a result of feelings of deprivation at the group level. Future research on group psychological contract breach and its relationship with various group-level outcomes should continue to look for additional mediators of this relationship because they may play a critical role in explaining why group psychological contract breach is not directly related to group outcomes. Because

each group is unique, this process may vary from group to group. In some groups, then, fraternal deprivation may play a key role in mediating these variables; however, in other groups, trust, organizational support, or supervisor support may more likely to act as mediators here.

In sum, future theorizing about the group psychological contract should consider whether it emerges at the group level through a compositional or compilational process, or if its emergence has elements of both processes. In describing these two processes, Kozlowski and Klein (2000) developed a typology of emergence that suggests that emergence processes may vary on a continuum ranging from isomorphic composition at one extreme, to discontinuous compilation at the other. While these two ends of the continuum are polar opposites, Kozlowski and Klein (2000) argue that most emergence processes occur somewhere in between and, as such, they exhibit elements of each (Bliese, 2000). Accordingly, group psychological contracts do not have to be considered as emerging from either processes of composition or compilation; rather, they can be a mixture of both. For this reason, in future theory development, researchers should consider if and how differences, unique circumstances, and other dissimilarities between group members and groups, affect the emergence of the group psychological contract and the outcomes that may result when it is breached.

Empirical Research Considerations

Overall, this study had several strengths. The methodology for this study included collecting data at two points in time and using a combination of multiple regression and mixed models to analyze the data. The data analyses provided a rigorous test of the hypotheses and were appropriate for the multilevel nature of the data and the

research questions. Additionally, the sample itself was a strength of the study. In particular, many of the hypotheses tested in this dissertation were based on the premise that employees were working in group settings, and the branches and departments of this bank provided an ideal setting for studying organizationally-defined groups.

Of course, there are some limitations of the present design as well. The most significant drawback of the current design is that all of the data were collected from the employee through self-report measures. This type of design is susceptible to common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This concern is lessened to some degree because the data were collected at two points in time, but there are alternative research designs that would improve upon the design employed in this study. In particular, collecting data for the outcome variables from multiple sources, such as supervisors, would be one such improvement. This was attempted for the present study; unfortunately, low participation by supervisors resulted in too few responses for their ratings to be included in the formal tests of my hypotheses. Additionally, future studies should research could consider the use of more objective measures, such as branch performance (for group-level performance), employee write-ups (for dysfunctional behaviors), or archival measures that might be available. Another potential way to strengthen the design of the study is to collect multiple ratings of breach, and other variables, over a longer period of time. This would allow researchers to make inferences about causal relationships.

The design is also limited by the sample of the study. While this particular sample is strong in many aspects (e.g., organizationally-defined groups, variance in number of individuals per group, their roles, and group size), the sample is also fairly

idiosyncratic. Specifically, the sample consisted of professional staff who worked in the banking industry. Thus, these findings have limited generalizability to organizational settings where employees are blue-collar workers or to other professional environments. In future studies, therefore, a larger variety of groups should be surveyed to determine if the findings from this study generalize to other types of workers (e.g., blue-collar) and industries. Ideally, future research could include groups from a number of occupations, including both blue and white collar employees, and industries all within a single study.

Another limitation of this study is the relatively low ICC(1) and ICC(2) values that were obtained for some of the variables. Of the ten group-level variables examined in this study, only five of them had ICC(1) values that would be considered acceptable, and the highest ICC(2) value was 0.45, which is still well below the commonly used cut off of 0.70 (e.g., Wu et al., 2010). Although the data analyses should be appropriate here because of the acceptable r_{wg} values, the potential relevance of ICC scores and their acceptable levels should be thoughtfully considered in future research on the group psychological contract. Typically, ICC scores are considered to be the best indicator when determining if aggregation is appropriate, with higher values for ICC(1) scores and lower values for ICC(2) scores calling into question the appropriateness of aggregating variables to the group level. However, the theoretical issues discussed earlier (e.g., differences between compositional and compilational models) may influence the aggregation considerations that should be made when researchers seek to investigate the group-level psychological contract and/or its antecedents and outcomes.

Bliese (2000) stated that the type of process through which a higher-level construct emerges has implications for data aggregation. Because agreement and

indices of reliability are important for the assessment of the validity of group-level constructs, it is important to consider if the data should be aggregated and how it will look once it is aggregated. The fundamental assumption of aggregation is that the data collected from individuals can be combined to represent collective constructs (Bliese, 2000; Kozlowski & Klein, 2000). The assumption that individual ratings can be combined to represent group constructs works well for phenomena that emerge through a compositional process. Indeed, in an isomorphic compositional process, the lower-level and higher-level constructs are considered to be, for the most part, identical (Bliese, 2000; Kozlowski & Klein, 2000). However, if the construct emerges through a compilational process, these assumptions may not be appropriate. Because the lower-level variables in a compilation model are expected to be different within each group, the aggregation of this data may have different aggregation and reliability statistics than data that are expected to be similar across groups. Bliese (2000) argues that there is no theoretical reason to establish agreement about the aggregated variable when it is expected to have emerged from a compilation process. Specifically, he states, “in compilation processes, agreement measures have little if any importance in terms of establishing the construct validity of the measurement model” (p. 366).

In this study, fraternal deprivation had less than satisfactory ICC scores. However, when one considers that feelings of relative deprivation may manifest differently for each individual member of a group, this lack of agreement is understandable. Indeed, feelings of deprivation may be highly variable among group members, but they should still result in the same outcomes. For instance, some group members may only need to feel a little deprived before they will react, while others may

have a much higher threshold that must be crossed before they begin to react as a result of their feelings. Accordingly, when considering the group psychological contract and related constructs, researchers should carefully consider the emergence process and the implications it has for commonly used agreement statistics. Indeed, just because the aggregation statistics for a group-level variable do not exceed or fall below a certain value, this does not necessarily mean that it is not representative of the group-level construct (Bliese, 2000).

In future studies, researchers should also consider the measurement of the group psychological contract, particularly with regard to its multidimensionality. As the post-hoc analysis showed, the measure used in this study had two distinct dimensions; however, at the individual level, the psychological contract has been shown to be comprised of multiple dimensions, which are captured by a variety of items (e.g., Robinson & Morrison, 1995b; Turnley et al., 2003). In chapter 4, some of these dimensions were discussed in the post-hoc analysis, with 21 items making up six dimensions. As work on the group psychological contract progresses, empirical tests of various group psychological contract measures will be essential in order for research in this area to advance. Currently, there is no single measure of individual psychological contract breach consistently used in research (e.g., Robinson & Morrison, 1995b, Rousseau, 2000; Telekab et al., 2005); indeed, researchers have a number of items and scales to choose from, and it is often unclear why they use some measures rather than others in their studies. Ideally, researchers should look to these individual-level measures to test and evaluate multiple group psychological contract items in order to develop a measure that has strong reliability and validity. Ideally, this measure would

also allow researchers to identify and examine different dimensions at the group level. This is one more area where using a compositional model of group psychological contract development should be very helpful. In particular, rather than focusing only on aggregating the currently used individual measures, researchers should also begin considering items that are unique to the group. These types of items are more likely to provide useful and meaningful measures and, consequently, to help researchers to better understand the dimensions of the group psychological contract.

Practical Implications

Like research on the psychological contract breach at the individual level, the present research suggests that breach of group psychological contracts leads to negative consequences. Specifically, the findings of this dissertation indicate that groups of employees feel that there are promises and obligations that exist between them and their employer and that when these promises and obligations are unfulfilled there are negative feelings that follow. These negative feelings were associated with elevated levels of conflict between the group and the organization, as well as reduced levels of cohesiveness among group members. Therefore, breach of the group psychological contract can be damaging to organizations.

As discussed earlier, the use of groups and teams in contemporary organizations continues to grow (Cohen & Bailey, 1997). The ability to work in teams is an attribute that many recruiters look for when hiring recently graduated college students (e.g., Korkki, 2010), and this trend is only likely to intensify over the next few years if the increased use groups and teamwork continues (Cohen & Bailey, 1997). As employers continue to utilize groups to accomplish organizational tasks, managers should be

mindful that supporting groups and following through on their promises will be critical if organizations expect their groups to achieve a high level of performance.

It should also be noted again that group-level psychological contract breach was significantly related to individual psychological contract breach. This means that breach of the group's psychological contract makes it more likely that individuals will experience a breach of their own personal psychological contracts. This places an even greater responsibility on organizations to fulfill the group psychological contract because, if they fail to do so, there will not only be negative group outcomes but also negative consequences at the individual level as well. If organizations cannot live up to its obligations with regard to the group psychological contract, prior research suggests that they should do everything possible to explain to employees why it is not being fulfilled (Morrison & Robinson, 1997). However, while addressing breach in a way that is consistent with principles of organizational justice may lessen the negative effects of breach, if there are reoccurring breaches of the group psychological contract, the effectiveness of this strategy is likely to diminish.

Finally, understanding the role of HR practices in the formation of the psychological contract may be critical for employers who want to properly manage the promises and obligations they make to their employees. In this dissertation, the consistency of practices during the hiring processes was predictive of agreement about the group psychological contract. This suggests that recruitment and hiring is a critical time when employees begin to perceive that promises and obligations are extended to them and their groups, and the basis of the psychological contract is formed.

Accordingly, organizations will want to be particularly attentive to what types of promises and obligations are extended to employees and groups at this time.

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APPENDIX A: SURVEY ITEMS

Demographic variables

Gender: Male, Female

Race: White, Native American, African American, Hispanic, Asian, Other

Education level (please circle the highest degree completed): High school, 1-year certificate, Some college, Associates degree, Bachelor degree, Graduate degree

How many years have you been working at your current job? _____

Age: Under 20, 21-25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, 61 or older

Standardized hiring practices (developed for this study)

I sometimes received conflicting information during the hiring process.

The hiring process seemed very organized. (RS)

During the hiring process every new employee who joins this organization receives the same information about being an employee here.

Standardized performance appraisal practices (developed for this study)

The performance appraisal process here is uniformly administered for all employees.

Every employee goes through the same performance appraisal process as everyone else.

Socialization tactics (Jones, 1986)

I have been through a set of training experiences which are specifically designed to give newcomers a thorough knowledge of job related skills.

I did not perform any of my normal job responsibilities until I was thoroughly familiar with departmental procedures and work methods.

Much of my job knowledge has been acquired informally on a trial and error basis, or in other words through on-the-job training. (RS)

There is a clear pattern in the way one role leads to another or one job assignment leads to another in this organization.

Each stage of the training process has, and will, expand and build upon the job knowledge gained during the preceding stages of the process.

The movement from role to role and function to function to build up experience and a track record is very apparent in this organization.

The steps in the career ladder are clearly specified in this organization.

Organizational documents (developed for this study)

(Organization) has a policy for every possible situation.

We all received the same information about how (Organization) wants us to do things.

At (Organization) the operating policies and practices are readily available to all employees.

Here at (Organization) there is a set way for doing almost everything.

Personality

Please use this list of common human traits to describe yourself as accurately as possible. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age.

Before each trait, please write a number indicating how accurately that trait describes you, using the following rating scale.

Very Inaccurate	Somewhat Inaccurate	Neither Inaccurate nor Accurate	Somewhat Accurate	Very Accurate
1	2	3	4	5
___ Bashful	___ Energetic	___ Moody	___ Systematic	
___ Bold	___ Envious	___ Organized	___ Talkative	
___ Careless	___ Extroverted	___ Philosophical	___ Temperamental	
___ Cold	___ Fretful	___ Practical	___ Touchy	

___ Complex	___ Harsh	___ Quiet	___ Uncreative
___ Cooperative	___ Imaginative	___ Relaxed	___ Unenvious
___ Creative	___ Inefficient	___ Rude	___ Unintellectual
___ Deep	___ Intellectual	___ Shy	___ Unsympathetic
___ Disorganized	___ Jealous	___ Sloppy	___ Warm
___ Efficient	___ Kind	___ Sympathetic	___ Withdrawn

Table Grouping (Dimension I=Extroversion, II=Agreeableness, III=Conscientiousness, IV=Emotional Stability, V=Openness).

#	Marker	Dimension	Reverse-scored
1	Bashful	I	RS
2	Bold	I	
3	Careless	III	RS
4	Cold	II	RS
5	Complex	V	
6	Cooperative	II	
7	Creative	V	
8	Deep	V	
9	Disorganized	III	RS
10	Efficient	III	
11	Energetic	I	
12	Envious	IV	RS
13	Extroverted	I	
14	Fretful	IV	RS
15	Harsh	II	RS
16	Imaginative	V	
17	Inefficient	III	RS
18	Intellectual	V	
19	Jealous	IV	RS
20	Kind	II	
21	Moody	IV	RS
22	Organized	III	
23	Philosophical	V	
24	Practical	III	
25	Quiet	I	RS
26	Relaxed	IV	
27	Rude	II	RS
28	Shy	I	RS
29	Sloppy	III	RS
30	Sympathetic	II	

Individualism-collectivism (Moorman & Blakely, 1995)

My coworkers and I are more productive when we do what we want to do rather than what the group wants us to do. (RS)

This group is most efficient when my coworkers and I do what we think is best rather than what the group wants them to do. (RS)

My group is more productive when its members follow their own interests and concerns. (RS)

I prefer to work with my coworkers rather than work alone.

Given the choice, I would rather do a job where I can work alone rather than do a job where I have to work with my coworkers. (RS)

I like it when members of my group do things on their own, rather than working with others all the time. (RS)

My coworkers should be willing to make sacrifices for the sake of the group (such as working late now and then, going out of their way to help, etc.).

Employees in the group should realize that they sometimes are going to have to make sacrifices to help their coworkers.

Individuals in my group should recognize that they are not always going to get what they want.

People should be made aware that if they are going to be part of this team, they are sometimes going to have to do things they don't want to do.

Employees in my group should do their best to cooperate with each other instead of trying to work things out on their own.

Group psychological contract items (adapted for this study from items 1-7 Rousseau, 2000; 8-12 Robinson & Morrison, 1995b)

Please indicate your level of agreement with the following statements about promises made between (Organization) and your group (e.g., those in who are in similar positions to you, such as other tellers or loan officers). “(Organization) has promised...”

to support the employees working in this group so they can attain the highest possible levels of performance.

- to help the employees working in this group respond to ever greater industry standards in reporting, documentation, and so forth.
- to enable the employees working in this group to adjust to new and challenging requirements created through regulation.
- to be concerned for the welfare of the employees working in this group.
- to be responsive to the concerns and well being of the employees in this group.
- to make decisions with the interests of the employees working in this group in mind.
- to be concerned for the long-term well-being of the employees working in this group.
- to reward (e.g., bonuses) the employees working at this branch based on the group's level of performance.
- to provide the employees working in this group with the materials and equipment needed to perform the group's functions.
- to provide the employees working in this group the support and assistance they need to perform their job.
- to provide the employees working in this group with quality working conditions.
- to treat the employees working in this group fairly and impartially.

Group psychological contract breach (adapted for this study from items 1-7 Rousseau, 2000; 8-12 Robinson & Morrison, 1995b)

The following set of questions focus on how well (Organization) has fulfilled the promises made to the group of employees working at your branch. Please select the response which best answers the following statement: “(Organization) has kept its promises to our group about...”

- supporting the employees working at this branch so they can attain the highest possible levels of performance.
- helping the employees working at this branch to respond to ever greater industry standards in reporting, documentation, and so forth.
- enabling the employees working at this branch to adjust to new, challenging requirements created through regulation.

being concerned for the welfare of the employees working at this branch.

being responsive to the concerns and well-being of the employees working at this branch.

keeping the interests of the employees working at this branch in mind when making decisions.

being concerned for the long-term well-being of the employees working at this branch.

providing rewards (e.g., bonuses) to the employees working at this branch based on the branch's level of performance.

providing the employees working at this branch with the materials and equipment needed to perform the branch's functions.

providing the employees working at this branch the support and assistance needed to perform their job.

providing the employees working at this branch with quality working conditions.

treating the employees working at this branch fairly and impartially.

Individual psychological contract items (Robinson & Morrison, 1995b)

As you read this first set of questions please keep in mind that we are interested in the extent to which (Organization) obligated itself to provide each of the following things. Do not focus on what was actually provided or what you would have liked (Organization) to provide, but instead focus on what (Organization) promised to provide. Please indicate your level of agreement with the following statements. "(Organization) has promised..."

an attractive benefits package.

a good health-care benefits package.

a competitive salary (a salary comparable to that paid by similar organizations).

a fair salary (a salary that is reasonable for the job I do).

pay commensurate to my level of performance.

rewards (e.g., bonuses) based on my performance.

a job that is challenging.

a job that has high responsibility.

a job that is interesting.

a job that provides a high level of autonomy.

opportunities to grow and advance within the organization.

opportunities for career development.

opportunities to receive promotions.

a safe working environment.

resources necessary to perform my job.

support and assistance needed to perform my job.

the opportunity to remain with the organization long-term (i.e. job security).

respectful treatment from upper management.

a pleasant work environment.

honest and fair treatment from upper management.

open communication with upper management.

Individual psychological contract breach (Robinson & Morrison, 1995b)

This set of questions asks you to assess how well (Organization) has fulfilled the promises and commitments it made to you. Please select the response that best answers the following statement: “(Organization) has kept its promises commitments to me about...”...

an attractive benefits package.

a good health-care benefits package.

a competitive salary (a salary comparable to that paid by similar organizations).

a fair salary (a salary that is reasonable for the job you do).

pay commensurate to your level of performance.

rewards (e.g., bonuses) based on your performance.

a job that is challenging.

a job that has high responsibility.

a job that is interesting.

a job that provides a high level of autonomy.

opportunities to grow and advance within the organization.

opportunities for career development.

opportunities to receive promotions.

a safe working environment.

the resources necessary to perform your job.

the support and assistance needed to perform your job.

the opportunity to remain with the organization long-term (i.e. job security).

respectful treatment from upper management.

a pleasant work environment.

honest and fair treatment from upper management.

open communication with upper management.

Fraternal deprivation (based on items from Crosby, 1976; Feldman et al., 2002; Olsen et al., 1995)

Those of us working at the group have really been treated unfairly by the organization.

I have the impression that those of us working in this group are worse off in the organization than we should be.

In general, those of us working in this group ought to have a better job situation with (Organization) than we currently have.

Those of us working in this group want a better job situation within (Organization) than our current one.

Those of us working in this group deserve more from (Organization).

Cohesion (Carless & De Paola, 2000)

The employees in our group are united in trying to reach its goals for performance.

I'm unhappy with the employees of my group's level of commitment to their work. (RS)

People who work at this group have conflicting aspirations for the group's performance. (RS)

The employees at this group do not give me enough opportunities to improve my personal performance. (RS)

The employees at this group like to spend time together outside of work hours.

Employees at this group do not hang out outside of work hours. (RS)

People who work at this group rarely attend social functions together. (RS)

Employees who work at this group would rather work on their own, rather than with their coworkers. (RS)

For me, being an employee at this group is one of the most important social groups I belong to.

Some of my best friends work in this group.

OCB-group (based on items from Williams & Anderson, 1991)

I help my group members who have been absent.

I help other branch employees who have heavy workloads.

I assist other branch members with their work (when not asked).

I take time to listen my group members' problems and worries.

I go out of my way to help new employees of the branch.

I take a personal interest in other employees at the branch.

I try to pass along information to other employees of the branch.

Group-organization conflict (based on items from Jehn, 1995; Jehn et al., 1999)

How much friction is there between (Organization) and the employees working in this group?

How much are personality conflicts evident between (Organization) and the employees working in this group?

How much tension is there between (Organization) and the employees working in this group?

How much emotional conflict is there between (Organization) and the employees working in this group?

How often do the employees working in this group disagree with (Organization) about opinions regarding the work being done?

How frequently are there conflicts about ideas between (Organization) and the employees working in your group?

How much conflict about the work done your group is there between (Organization) and the employees working at the group?

To what extent are there differences of opinion between (Organization) and the employees working in this group?

How often do members of your group disagree with (Organization) about what the employees working in this group should do?

How frequently do the employees working in your group disagree with (Organization) about the way to complete a branch task?

How much conflict is there about delegation of tasks between (Organization) and the employees working in this group?

Egoistic deprivation (based on items from Crosby, 1976; Feldman et al., 2002; Olsen et al., 1995)

I have really been treated unfairly by the organization.

I have the impression that I am worse off in the organization than I should be.

In general, I ought to have a better job situation than my current one.

I want a better job situation than my current one.

I deserve more from (Organization).

Job stress (Motowidlo, Packard, & Manning, 1986)

My job is extremely stressful.

Very few stressful things happen to me at work. (RS)

I feel a great deal of stress because of my job.

I almost never feel stressed because of my work. (RS)

Voice behavior (Van Dyne & LePine, 1998)

I develop and make recommendations concerning issues that affect employees working at this branch.

I speak up and encourage other employees in this branch to get involved in issues that affect the branch.

I communicate my opinions about work issues to other employees in the branch even if my opinion is different from theirs and they disagree with me.

I keep well informed about issues where my opinion might be useful to the employees of this branch.

I get involved in issues that affect the quality of work life here at this branch.

I speak up in this branch with ideas for new projects or changes in procedures.

OCB-O (Williams & Anderson, 1991)

My attendance at work is above the norm.

I give advance notice when I am unable to come to work.

Dysfunctional group behavior (1-4 Cole, Walter, & Bruch, 2008; 5 Skarlicki & Folger, 1997)

1. The employees working in this group sometimes actively hinder change and compliance with new standards.
2. The employees working in this group sometimes take aggressive action against new strategies that (Organization) tries to implement.
3. The employees working in this group sometimes choose to work in isolation from the rest of (Organization).

4. The employees working in this group sometimes engage in activities to weaken others at (Organization).
5. The employees working in this group sometimes intentionally work slower than they otherwise could.