

BALANCING TURNOVER AND PERFORMANCE: THE IMPACT OF COMMITMENT
DISTRIBUTION ON OUTCOMES

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ABSTRACT

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Decades of research on turnover have demonstrated that organizations incur significant costs during the course of their efforts to retain or replace human capital (Allen, Bryant, & Vardaman, 2010). However, recent models have shifted their attention to identifying predictors of retention rather than turnover, resulting in the introduction of new constructs and proposed relationships. This dissertation draws on three frameworks – job embeddedness (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001), relational job design (Grant, 2007), and commitment bond formation (Klein, Molloy, & Brinsfield, 2012) – to present an integrated theoretical model for predicting retention and performance. The study proposed examines how direct contact with beneficiaries results in employees' decisions to form commitment bonds, and polynomial regression analyses shed light on how the distribution of these commitment bonds result in varying levels of desired outcomes.

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For my grandparents,
Woon Hwa & Soon Ja Lee and Yung Woon & Key Hwa Koh,
who inspired this dissertation and taught me to live by faith and persevere in all things.

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INTRODUCTION

Despite the decades of research on the antecedents of voluntary turnover and retention, researchers and practitioners alike continue to exert effort and resources into better understanding why some individuals choose to leave their organizations and others choose to stay. Indeed, the loss of human capital results in significant costs to the organization as it must recruit and train new employees (Allen, Bryant, & Vardaman, 2010) to replace the ones who have departed. As such, it is no surprise that organizations seek to implement human resources policies, procedures, and practices to increase the retention of employees to better ensure organizational success (Holtom, Mitchell, Lee, & Eberly, 2008). Over the past four decades, theories and models of turnover have looked beyond job satisfaction to explore the effects of negative events on turnover (Holtom, Mitchell, Lee, & Inderrieden, 2005; Lee & Mitchell, 1994; Lee, Mitchell, Wise, & Fireman, 1996), motivational forces for leaving versus staying (Maertz & Campion, 2004), job embeddedness (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001), and commitment (Allen & Meyer, 1990; Eagly & Chaiken, 1993; Solinger, van Olffen, & Roe, 2008) to better identify antecedents of turnover and retention. However, much of this research has neglected to consider the effects of an employee's network of their individual relationships with others.

It has long been thought that an individual's decision to leave an organization is primarily affected by his or her individual differences and attitudes. For example, research has demonstrated that individual differences such as personality and cognitive ability (Boudreau, Boswell, Judge, & Bretz, 2001; Zimmerman, 2008; Zimmerman, Boswell, Shipp, Dunford, & Boudreau, 2012) and job satisfaction (Boswell, Boudreau, & Tichy, 2005; Trevor, 2001; Wright & Bonett, 2007) are related to turnover intentions and actual turnover. In an effort to expand

beyond individual characteristics, other research has considered how dyadic relationships with supervisors (Bauer, Erdogan, Liden, & Wayne, 2006; Harris, Wheeler, & Kacmar, 2009) and employee socialization (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; Chatman, 1991; Major, Kozlowski, Chao, & Gardner, 1995) affect turnover intentions. Moreover, research on embeddedness has repeatedly demonstrated that links to coworkers, perceived fit, and sacrifices associated with leaving have resulted in employee retention (Crossley, Bennett, Jex, & Burnfield, 2007; Jiang, Liu, McKay, Lee, & Mitchell, 2012; Mitchell et al., 2001), suggesting that employees are more likely to stay when they are more deeply embedded in both their workplace and in the community.

However, despite these developments in turnover and retention research, an assumption under which most of prior research operates is that turnover events are isolated incidents and unrelated to one another. This is problematic because organizations are increasingly organizing their employees into interdependent work groups (Garvey, 2002) and are especially relying on self-managing teams to effectively and efficiently carry out organizational functions (Jung, Avolio, Murry, Sivasubramaniam, & Sosik, 1996; Spreitzer, Cohen, & Ledford, 1999). While the organization can create these formal structure of relationships, informal social networks also form and often go unrecognized by the organization. The nature of relationships employees have with one another and their clientele can affect the social networks in which employees find themselves embedded, over and above one dyadic relationship.

Although research examining effects of specific types of relationships on employee retention is limited, a few studies have found evidence supporting the importance of considering how different kinds of relationships between employees help to retain those who remain when coworkers voluntarily leave the organization (e.g., Krackhardt & Porter, 1985; Krackhardt &

Porter, 1986). Krackhardt and Porter (1985) found that these relationships have a dual effect. On the one hand, personal relationships with coworkers helped to retain employees even after coworkers left the organization. On the other hand, they also found that turnover occurs in clusters rather than in isolated incidents, referring to communication networks as a means by which turnover “snowballed” among employees. These findings suggest that turnover is affected by more than individual differences. Rather, turnover contagion likely contributes to and reinforces a turnover culture in the organization. Moreover, Felps and colleagues (2009) recently developed a theory of turnover contagion and demonstrated that coworkers’ job search behavior and embeddedness are related to focal employees’ voluntary turnover, indicating that even when an organization does not have a culture of high turnover, each turnover event can serve as “case zero” for a turnover epidemic to take place.

This dissertation recognizes the importance of the social networks in which employees find themselves and seeks to develop and test a theoretical model for increasing retention by drawing from job embeddedness (Mitchell et al., 2001), relational job design (Grant, 2007) and a recent reconceptualization of workplace commitment (Klein, Molloy, & Brinsfield, 2012) to highlight how specific types of relationships can promote employee retention and workplace behavior. Specifically, I will propose and test a process model that explains how direct interactions with others influences employees’ decisions to commit to beneficiaries and how the distribution of these commitments differentially affect retention and performance.

LITERATURE REVIEW

Turnover and Retention

Turnover and retention research can be traced back to March and Simon's (1958) seminal work on the theory of organizational equilibrium (Holtom et al., 2008). According to March and Simon (1958), employee turnover decisions are influenced by two factors: perceived desire to leave the organization and perceived ease of movement. They argued that the organization needs to balance employee and organization contributions and incentives in such a way that maintains employees' perceived desirability to remain with the organization. Using this as a starting point, Holtom and colleagues (2008) broke down turnover and retention research into three time periods to organize the research focus and trends in the different eras. An overview of these time periods follows below.

Pre-1985: Building the foundation for future research. March and Simon's (1958) work served as a foundation for turnover and retention research in that they provided parsimonious arguments for why employees would leave their organizations. Specifically, March and Simon (1958) argued that both perceived desirability of movement and perceived ease of movement would operate independently of each other to motivate employees to leave their organizations. The argued independence of each predictor's effect on turnover served as a starting point for future researchers who wished to further explore the effects of one or both factors. To provide some future direction, March and Simon (1958) further emphasized job satisfaction and the size of the organization as determinants of employee's perceived desirability of movement and individual differences, such as ability, age, gender, and tenure as key predictors of employees' perceptions of ease of movement.

Building on March and Simon's (1958) theory of organizational equilibrium, Porter and Steers (1973) explored the effects of met expectations on turnover. To further explicate the nature of job satisfaction, they broke the job satisfaction construct down into four facets—organization factors, work environment factors, job-related factors, and personal factors – and examined their effects on withdrawal behaviors – absenteeism and turnover. They were able to link each of the four categories of job satisfaction to both absenteeism and voluntary turnover, which suggested that job satisfaction is multi-dimensional. As the first study to demonstrate that there are dimensions to job satisfaction, Porter and Steers (1973) provided the empirical evidence to warrant additional exploration of the dimensions' interdependent effects on turnover and retention.

In contrast to the singular approach Porter and Steers (1973) took by examining only job satisfaction as a predictor of turnover, Mobley (1977) proposed a more comprehensive, process model identifying the sequence of steps taken by employees before actually leaving their organizations. As such, his new model of turnover challenged previously-held assumptions that employees leave their organizations impulsively. Instead, he proposed that there are decisions made along the way that help an employee decide whether to leave the organization or remain with it. Building on the observation that the relationship between job satisfaction and turnover, though consistently negative and significant, is weak, Mobley (1977) argued that employees go through a series of withdrawal cognitions and job-search behaviors prior to leaving. Specifically, he introduced thoughts about quitting, evaluating the expected utility of searching for a new job, and evaluating the costs of quitting as pre-turnover cognitions employees have that help them determine whether to remain or leave the organization. Additionally, Mobley (1977) also introduced proactive behaviors that might lead to turnover – searching for job alternatives and

evaluating those alternatives. According to his model, these cognitions and behaviors served as mediating mechanisms between an employee's experienced job dissatisfaction and actual turnover.

Simplified forms of Mobley's (1977) model were applied, tested, and replicated in various studies (e.g., Miller, Katerberg, & Hulin, 1979; Mobley, Horner, & Hollingsworth, 1978), but Hom, Griffeth, and Sellaro (1984) established the validity of Mobley's (1977) model and further expanded it. Hom and colleagues (1984) proposed an alternative model in which two paths for turnover were introduced. They argued that once employees had thoughts of quitting, evaluated the alternatives of quitting, and intended to quit, they either engaged in job search or immediately turned over. Consequently, Hom et al. (1984) further supported the idea that turnover is not always an impulsive decision made by employees.

Answering calls for well-developed conceptual models of turnover and building on Mobley's (1977) model, Mobley, Griffeth, Hand, and Meglino (1979) reviewed the existing literature on turnover before they proposed a new conceptual model which incorporated change over time and moderating effects. In their model, they distinguished between present-oriented and future-oriented elements of satisfaction by taking into consideration the variance in levels of satisfaction over time as the employee is socialized into the organization. Specifically, they proposed that satisfaction is present-oriented whereas attraction and expected utility of the present role is future-oriented. Moreover, they further explicated that present- versus future-orientation also applies to job alternatives; time also affects perceptions of utility of attainable alternatives and consequences of staying versus quitting. Consequently, they argued some employees, though dissatisfied, may remain with the organization and, over time, exhibit more

alternative withdrawal behaviors, such as increased absenteeism. As such, Mobley et al. (1979) was the first study to consider moderating variables in turnover relationships.

Another model that expanded the conceptual approaches by which researchers studied turnover was the causal model of turnover, developed by Price and Mueller (1981). The first comprehensive model to examine distal antecedents of turnover, the causal model of turnover proposed predictors of job satisfaction and mediating effects for job satisfaction and intentions to stay. Price and Mueller (1981) included both job-related and relationship-related predictors of job satisfaction in their model, and they also proposed several alternative predictors of employees' intent to stay with the organization. Conceptualized as a dimension of commitment, intent to stay was proposed to have the most proximal relationship with turnover, mediating the relationship between job satisfaction and turnover.

Price and Mueller (1981) then tested their model on a sample of nurses and found evidence for multiple predictors of job satisfaction. However, the interesting results were those that contradicted some of the established relationships from prior research. For example, job satisfaction was a weaker predictor of turnover compared to commitment (intent to stay) in their model, and when the opportunity of alternative jobs and pay are examined simultaneously as predictors of turnover, opportunity was found to be four times as important as pay (Price & Mueller, 1981). In addition to sparking interest in pushing the limits of turnover research, the causal model of turnover shifted research focus on job satisfaction as the antecedent to antecedents of job satisfaction.

While most turnover research continued to identify antecedents of voluntary turnover, Dalton, Krackhardt, and Porter (1981) brought attention to a new way of categorizing turnover – functional versus dysfunctional turnover – and challenged the assumptions under which

traditional turnover research operated. Specifically, they argued that only viewing turnover events as voluntary or involuntary results in assuming that all voluntary turnover is dysfunctional, or events in which organizations want to retain any employee who desire to leave. The problem with this approach, according to Dalton et al. (1981), is that it results in inaccurate representations of how turnover affects organizations and a misallocation of resources and efforts by organizations to reduce turnover.

Instead, in their research, Dalton et al. (1981) considered the possibility that some turnover is functional, or cases in which organizations remain unconcerned about certain employees leaving the organization because it is deemed beneficial to the organization. They demonstrated that approaching turnover as either functional versus dysfunctional and avoidable versus unavoidable greatly reduced the perceived rate of undesirable turnover in organizations. With these results, they argued that categorizing a turnover event as simply voluntary versus involuntary is a necessary but insufficient method to effectively determining how the organization should manage the event. Some voluntary turnover events are unavoidable regardless of what the organization does to prevent it because they are due to situations outside of the organization's control, such cases in which employees leave due to family affairs or health issues. Because they are out of the organization's control, these are cases in which the organization should be unconcerned and withhold efforts to retain these employees as those efforts would be futile.

Consequently, Dalton et al. (1981) urged future researchers of turnover to consider how turnover events impact the organization (dysfunctional versus functional) partly due to the circumstances under which they occur (avoidable versus unavoidable) before concluding that organizations should expend resources and make efforts to retain their employees who engage in

voluntary turnover. Building on Dalton et al.'s (1981) research, Dalton, Todor, and Kradkhardt (1982) developed a theoretical framework that generated a taxonomy of functional turnover and highlighted issues in traditional turnover measurement methods. In their expanded taxonomy, Dalton and colleagues (1982) argued that the dysfunctional aspects of turnover as traditional research has suggested is overstated, and they proposed an alternative method of measuring turnover that takes into account the organization's evaluation of the employee. While traditional turnover research measured turnover dichotomously (stay or leave), Dalton et al. (1982) suggested that a more appropriate and accurate reflection of dysfunctional turnover's effect on organizations requires consideration of the employee. Rather than assuming that voluntary turnover of every employee is dysfunctional, Dalton et al. (1982) argued that organizations should evaluate the quality of the specific employee and, more specifically, consider the likelihood of rehiring the leaving employee, the quality of employee, and the replaceability of the employee. Additionally, echoing findings from Dalton et al.'s (1981) study findings, Dalton et al. (1982) included organizational control in their theoretical framework and emphasized the importance of evaluating the extent to which the turnover event is unavoidable and how organizations should consider if it is more effective to deal with the turnover event rather than engage in efforts to prevent it.

Combined, these early works on functional and dysfunctional turnover served as an example of how, despite the importance of the foundations of turnover research established during this time period, there was still much more to learn about how withdrawal decisions are made (Porter & Steers, 1973). The models from pre-1985 served to squarely establish job satisfaction and intentions to turnover as consistent and significant predictors of employee

voluntary turnover. Yet, assumptions still needed to be challenged and tested, and the approaches in categorizing and measuring turnover needed further consideration.

1985-1995: Expanding horizons. The late 1980s and early 1990s of turnover research were characterized by a shift in focus to consider the role of contextual variables and negative, personal conditions in turnover relationships (Holtom et al., 2008). Consequently, most of the models proposed during this time introduced organizational- or group-level constructs and individuals' relationships in the workplace as important variables. The focus on contextual variables shifted more of the weight of influencing voluntary turnover decisions onto the shoulders of the organization; the decision to leave the organization was no longer assumed to be solely impacted by the employee's personal attributes or attitudes.

Nevertheless, some of the more pivotal research conducted in the early 1990's referenced more individual differences. For example, building on research that increasingly focused on organizational commitment as an antecedent for turnover (e.g., Griffin & Bateman, 1986; Mowday, Porter, & Steers, 1982), Meyer and Allen (1991) introduced their three-component model of commitment. Their model proposed that organizational commitment has three dimensions, each reflecting a different reason to remain with an organization, which helped to synthesize existing research. This three-component model allowed future researchers to gain specific insight into each kind of commitment and how they work together to contribute to employee retention.

Building on early works on functional turnover, Hollenbeck and Williams (1986) further supported the need to consider turnover functionality, or "the distinction between the performance levels of stayers and leavers" (p. 607), and bridged this stream of turnover research with that of work attitudes and their effects on turnover. They argued that turnover functionality,

compared to the rate of turnover (turnover frequency), is more important for organizational effectiveness because it evaluates the value of the leaver. Extending earlier claims that solely measuring turnover as voluntary or involuntary results in overstating the costs of turnover (Dalton et al., 1981; Dalton et al., 1982), Hollenbeck and Williams (1986) argued that the same can be said about the importance of work attitudes as predictors of turnover. Although work attitudes predict turnover frequency, neither are related to job performance, which suggests that turnover functionality is unrelated to both job attitudes and turnover frequency (Hollenbeck & Williams, 1986). Indeed, they found that despite significant relationships between various job attitudes (i.e., job satisfaction, organizational commitment, job involvement and motivation to turnover) and turnover, there were no significant relationships between job attitudes and turnover functionality. Consequently, their study demonstrated that understanding the cost associated with turnover requires consideration of how often employees leave *and* their respective levels of job performance; organizations are better off replacing poor performers who leave rather than engage in efforts to retain them.

In another stream of research, Rosse (1988) proposed that employees go through a progression of withdrawal. He built on earlier research on withdrawal behaviors (Mobley et al., 1979; Porter & Steers, 1973) to extend existing research on the progression of withdrawal, which had primarily leveraged simple analyses, to demonstrate the hierarchical relationship of withdrawal behaviors. Specifically, Rosse (1988) found that the progression of withdrawal involved graduating from tardiness to absences and finally to quitting. More interestingly, his study demonstrated that there is indeed an increase in lateness and absences over time. In other words, the frequency in lateness increased after an absence event, and employees were more likely to be absent following a lateness incident. This pattern demonstrated a progression effect

rather than merely a stable proneness for tardiness or absenteeism. Finally, Rosse (1988) found that turnover itself was more probable after multiple events of lateness and absences, but it was more likely to take place after absences rather than after lateness. These findings not only validated the importance of considering withdrawal behaviors, but they highlighted the value of understanding how behaviors leading to turnover take place over time.

Hulin (1991) also focused on withdrawal behaviors but proposed them as adaptation responses to job dissatisfaction. He reviewed two models, the adaptation cycle model (Rosse & Miller, 1984) and the withdrawal-adaptation model (Hulin, Roznowski, & Hachiya, 1985), and posited that withdrawal behaviors – lateness, absenteeism, turnover, and retirement – are intended to assist the employee in adapting to their job dissatisfaction. Specifically, the adaptation cycle model (Rosse & Miller, 1984) proposed that engaging in work withdrawal behaviors is an adaptation response to reduce dissatisfaction, which was triggered by an event. Because one factor of the job is the source of the employee's dissatisfaction, he or she adapts by putting both physical and psychological distance between the dissatisfied himself or herself and his or her work environment (Hulin, 1991; Rosse & Miller, 1984).

Alternatively, the withdrawal-adaptation model (Hulin et al., 1985) argued that employees engage in behaviors beyond the typical withdrawal behaviors. Rather, tardiness, absenteeism, turnover, and retirement are only one of four kinds of behavioral responses to dissatisfaction, and employees can also choose to adapt by engaging in behaviors that increase their job outcomes, reduce their job inputs, or change their work role (Hulin et al., 1985). Hulin (1991) acknowledged that both models overly focus on the negative behaviors in an attempt to understand the behaviors in which employees engage when they face insufficient rewards of

some nature for engaging in their work role, but he also noted that they stress the importance of considering withdrawal behaviors as a collective rather than as isolated, unrelated incidents.

Perhaps the most influential model developed in this time period, the unfolding model of turnover (Lee & Mitchell, 1994) revolutionized the way researchers viewed turnover. As a process model, the unfolding model of turnover maintained that not all turnover decisions are due to job dissatisfaction. Rather, Lee and Mitchell (1994) argued that employees can be motivated to leave their jobs by *shocks*, or negative events that take place at the workplace. They proposed four decision pathways by which employees may turnover from their organization, each of which takes into consideration various psychological processes and consideration of external events. Consequently, the unfolding model of turnover highlighted the dynamic and complex process by which employees turnover and challenges future researchers to explore beyond the traditional work attitudes, such as job satisfaction, met expectations, and organizational commitment, to better understand why and how employees turnover.

1995 to present day: Trends and future directions. In their review, Holtom and colleagues (2008) highlighted the current trends in turnover research and made suggestions for future research directions. The overarching conclusion they drew is that although more theoretical constructs are being introduced to the turnover literature, there is still little theoretical consensus surrounding those constructs. For example, turnover research has continued to focus on individual differences, such as personality (Barrick & Zimmerman, 2005) and affectivity (Pelled & Xin, 1999), as predictors of turnover and moderators of turnover relationships (Holtom et al., 2008). Others have considered these individual differences as potential moderators in turnover relations (Allen, Weeks, & Moffit, 2005) and found they do indeed have moderating effects.

Extending the unfolding model, Maertz and Campion (2004) combined both content and process turnover models to present different profiles of quitting. Specifically, they compared four types of quitting behaviors – impulsive, comparison, preplanned, or conditional quitting – along eight motivational forces (Maertz, 2001) by which employees can be attached to or withdraw from the organization. The eight motivation forces – affective, contractual, constituent, alternative, calculative, normative, behavioral, and moral – were found to relate differently to the four types of quitting behaviors, suggesting that there is value in considering different combinations of motivational forces on quitting behaviors rather than assuming employees all quit or remain for the same reasons. By focusing on how different motives affect the different processes by which employees quit, Maertz and Campion (2004) opened new directions for turnover researchers to consider events that may trigger such motives and reasons why employees may not quit right away.

Another trend in turnover research has been a continued focus on stress- and change-related attitudes, which stem from organizational change and employee adaptation (Holtom et al., 2008). Unlike previous turnover research on stress effects on turnover that have assumed all stress is negative, more recent research has focused on different kinds of stress and their unique relationships with job attitudes, withdrawal, and turnover (e.g., Podsakoff, LePine, & LePine, 2007). Additionally, other researchers have looked at stressful events, such as lay-offs, abusive supervision, and sexual harassment, and how they relate to withdrawal behaviors and turnover. Given the increasingly dynamic and stressful organizational life in modern day, this research stream is particularly valuable for identifying contextual factors that might explain why employees may view turnover as a desirable outcome.

A somewhat related third trend in turnover research has been to empirically test and build on the unfolding model of turnover (Lee & Mitchell, 1994). Building on the argument that negative shocks – particularly jarring events that trigger employees to begin the psychological analyses associated with quitting their jobs – take place and that employees may have pre-existing plans of actions (scripts) in place for how to deal with shocks, the unfolding model acknowledged how employees react to negative events in the workplace. Studies that have applied and tested the unfolding model of turnover have consistently found that one of the paths proposed in the model is taken by people who quit their jobs (Holtom et al., 2005; Lee et al., 1996), contributing to the validity of the unfolding model and anchoring it as a launching board for continued future research.

Finally, the most recent turnover and retention research frameworks adopted a different approach by highlighting the variables and constructs that encourage an employee to stay with their organization rather than those that motivate them to leave (Holtom et al., 2008). Although the relationships themselves remain the same, the difference in research questions has introduced new constructs. Specifically, there has been an increased interest in job embeddedness (Mitchell et al., 2001), which proposes three dimensions (links, fit, and sacrifice) that serve to enmesh an employee in their organization, making it more difficult for them to leave. Various studies have been conducted examining the dimensions of job embeddedness (e.g., Bambacas & Kulik, 2013; Burton, 2015; Burton, Holtom, Sablinski, Mitchell, & Lee, 2010; Lee, Mitchell, Sablinski, Burton, & Holtom, 2004), which have consistently found support for job embeddedness as a significant predictor of turnover above and beyond job satisfaction. There have also been efforts to develop and validate scales for more appropriately measuring on-the-job and off-the-job embeddedness (e.g., Clinton, Knight, & Guest, 2012; Crossley et al., 2007). Building on these

studies, this dissertation aims to introduce an alternative method for measuring job embeddedness that is more proximal to the nature of the relationships that enmesh employees in their organization and increase their retention.

Job Embeddedness

Job embeddedness “represents a broad constellation of influences on employee retention” that create “a net or a web in which an individual can become stuck” (Mitchell et al., 2001, p. 1104). Drawing from field theory (Lewin, 1951) and framing turnover relationships to focus on new constructs that motivate employees to remain in the organization, Mitchell et al. (2001) developed the new construct of job embeddedness as an alternative explanation for why employees stay with their organizations. Job embeddedness has three dimensions, each of which are reviewed here.

Links. Encompassing formal and informal ties or connections between an individual and other people, links are broadly defined as “discernable connections” (Mitchell et al., 2001, p. 1104). Mitchell and colleagues (2001) argued that links can be psychological, social, or even financial, and, to some extent, represent the normative pressure to remain with an organization. However, links differ from normative commitment in that although employees with high normative commitment feel a strong sense of obligation to stay at their organization, links do not necessarily have to be connections to a specific individual. Links also take into consideration the sheer number of groups, committees, or other collectives to which an employee belongs, and these collective entities are not included in Allen and Meyer’s (1990) conceptualization of normative commitment (Mitchell et al., 2001). Moreover, links can be established without a sense of obligation to the other to which the employee is connected; they are merely connections the employee has with other people, on and off the job.

Fit. The fit dimension of job embeddedness is the “employee’s perceived compatibility or comfort with an organization and with his or her environment” (Mitchell et al., 2001, p. 1105). It considers the employee’s personal values, future plans, and career goals as elements that must fit with both the demands of his or her job and the overall organizational culture. Fit also includes the surrounding community and environment and the extent to which one’s values, goals, and plans for the future fit in the local community. To some extent, fit relates to attachments to the organization or the community at large, but it remains distinctive from traditional conceptualizations of person-organization fit and affective commitment. For example, whereas affective commitment reflects the extent to which employees like their jobs and are emotionally attached to their organization, the fit dimension of job embeddedness does not harbor an emotional component (Mitchell et al., 2001). Additionally, Mitchell and colleagues’ (2001) conceptualization of fit incorporated more than person-organization fit to include overall, general fit perceptions with coworkers, cultures, jobs, groups, and teams. As such, they relaxed the more rigid definitions in traditional fit literature to look at the overarching level of fit.

Sacrifices. The final dimension of job embeddedness, sacrifices is defined as “the cost of material or psychological benefits that may be forfeited by leaving a job” (Mitchell et al., 2001, p. 1104). The losses include personal losses (e.g., high-quality coworkers or interesting work projects), financial losses (e.g., pension plans or stock options), career development losses (e.g., job stability due to tenure, advancement), and community losses (e.g., safe neighborhoods, friends and neighbors). As such, job embeddedness also includes on-the-job or off-the-job sacrifices (Mitchell et al., 2001). Yet, Mitchell and colleagues (2001) maintained that their sacrifices dimension is uniquely different from continuance commitment, which posits that employees remain committed to organizations due to a lack of alternatives. In their

conceptualization and operationalization of sacrifices, Mitchell et al. (2001) omitted job alternatives and instead specified entities that would be given up if employees left their jobs.

Job embeddedness as a unique construct. In addition to clarifying how the specific dimensions of job embeddedness are unique from related constructs, Mitchell et al. (2001) highlighted how the overall job embeddedness construct is different from job satisfaction, organizational identity, and constituency commitment. Specifically, they argued that job embeddedness is (a) less affective in nature and considers more than just compensation; (b) conceptualized at a higher level than organizational identity, ignoring how employees fuse their self-concept to the organization; and (c) considerate of the time it takes to develop links to others, perceptions of fit, and the perceived or objective sacrifices of leaving the organization. Studies that have applied job embeddedness in models of turnover have found that it does explain turnover above and beyond job satisfaction and organizational commitment (Crossley et al., 2007; Holtom & O'Neil, 2004; Jiang et al., 2012), providing evidence for job embeddedness as a unique and meaningful construct capable of explaining variance in employee turnover.

Measuring job embeddedness. Measures of job embeddedness began with a focus on the various dimensions of the construct. Scale validation efforts across two samples by Mitchell et al. (2001) in their seminal work resulted in a 40 item-scale for job embeddedness. The items assessed the employees' links, fit, and sacrifices associated with both the organization and community. Composite scores were calculated for each dimension, which could then be further collapsed into on-the-job embeddedness, off-the-job embeddedness, and overall job embeddedness scores. Items were answered using likert scales (e.g., *My job utilizes my skills and talents well*), dichotomous scales (e.g., *Are you currently married?*), and interval scales (e.g., *How long have you been at your present position?*). Twenty-seven of these items were adopted

by Mitchell et al. (2001) in their study of job embeddedness effects on organizational citizenship behaviors, job performance, absenteeism, and turnover. Although Lee et al. (2004) developed seven of their own items to fit the context of their study, their 34-item scale also assessed all six dimensions of job embeddedness to produce two composite scores of on-the-job embeddedness and off-the-job embeddedness.

In addition to developing their 40-item scale, Mitchell et al. (2001) called for future researchers to develop a global measure of job-embeddedness. Answering this call, Cunningham, Fink, and Sagas (2005) developed a 6-item scale anchored on a 7-point Likert scale. It was composed of one item for each dimension of job embeddedness. Crossley et al. (2007) also developed and validated a 7-item global measure of job embeddedness, which they argued would overcome limitations of the original scale by Mitchell et al. (2001). Nevertheless, as meta-analytic results found by Jiang and colleagues (2012) would suggest, the original items continued to be the most prevalent choice for measuring on-the-job and off-the-job embeddedness. Moreover, the common approach to examining job embeddedness was to calculate a composite score for on-the-job and off-the-job embeddedness; very little attention was given to the individual sub dimensions (links, fit, and sacrifices) with the exception of Hom and Xiao's (2011) study on social networks and on-the-job links.

Hom and Xiao's (2011) study examined the Chinese *guanxi* professional networks in Chinese companies and their effect on employee retention. *Guanxi*, or the "network of personally defined reciprocal bonds" (Redding, Norman, & Schlender, 1993, p. 565), is argued to serve as ties between individuals in the workplace and even transcend the boundaries of work and personal life to incorporate relationships with those in the family or local community (Hom & Xiao, 2011). By (a) strengthening on-the-job ties; (b) establishing high network identification;

(c) making corporate resources more accessible; (d) creating collective normative pressures; and (e) cultivating off-the-job embeddedness, *guanxi* networks were argued to increase an employee's propensity to stay with the firm. Hom and Xiao (2011) applied a social network approach to assess the extent to which employees' *guanxi* networks were closed, or densely formed, and found that network closure predicted employee retention. Furthermore, the organization's high-commitment human resource management practices, characterized by collective incentives, employment assurances, and flexible work designs (Hom & Xiao, 2011), enhanced the relationship between *guanxi* network closure and retention.

Relational Job Design

Drawing from work on prosocial motivation, Grant (2007) proposed a theoretical model for relational job design in which he argues that designing jobs in ways to maximize their relational nature "can support organizations' efforts, and fulfill individuals' motives, to make a prosocial difference" (p. 394). Breaking away from traditional job design theories, Grant (2007) argued that employee prosocial motivation can be increased by connecting employees to their beneficiaries. The model leveraged several key constructs and arguments, each of which are reviewed in the following sections.

Employees' beneficiaries. Defined as "the people and groups of people whom employees believe their actions at work have the potential to positively impact," (Grant, 2007, p. 395), beneficiaries are the core of the relational job design model. Beneficiaries can include coworkers and supervisors as well as clients, patients, customers, and groups or communities of individuals and are defined from the employee's perspective (Grant, 2007). Central to Grant's (2007) model was the idea that prosocial motivation is increased when employees perceive that they have an impact on their beneficiaries. Perceptions of impact on beneficiaries are affected by the

opportunities available to employees for them to positively impact their beneficiaries and the extent to which the job allows employees to have contact with their beneficiaries (Grant, 2007).

Impact on beneficiaries. According to Grant's (2007) theoretical model, impact on beneficiaries is affected by four dimensions – magnitude, scope, frequency, and focus. Magnitude is “the degree and duration of potential effects of the job on beneficiaries” (Grant, 2007, p. 397) and can be considered the “*how much*” of one's impact on beneficiaries. Specifically, it pertains to whether one's job leaves a lasting impact on beneficiaries, such as in the case of a first responder's impact on saving a victim's life after a car crash, or an insignificant impact, such as when a barista prepares a customer's morning coffee. Scope is the “number of...people potentially affected by the job” (Grant, 2007, p. 397) and can be considered the “*how many*” of one's impact on beneficiaries. It pertains to whether one's job affects many beneficiaries, such as the work in which architects engage when they design buildings, or just a few, such as the work of special education teachers.

Frequency, or “how often the job provides opportunities for affecting others,” (Grant, 2007, p. 397) can be considered the “*how often*” of one's impact on beneficiaries. Teachers could be said to occupy jobs with high frequency in job impact as they teach students daily whereas archeologists could be said to have jobs with relatively low frequency. Finally, focus, or “whether the job primarily provides opportunities to prevent harm or promote gains to other people,” (Grant, 2007, p. 397) can be considered the “*how*” of one's impact on beneficiaries. For example, police officers have more opportunities to prevent harm by monitoring criminal activity regularly whereas school janitors have fewer opportunities to prevent harm to schools. On the other hand, teachers have more opportunities to promote gains in their instruction of students whereas actors have relatively fewer opportunities to promote gains for movie audiences.

Contact with beneficiaries. In addition to these dimensions of job impact on beneficiaries, Grant (2007) proposed five dimensions of contact with beneficiaries – frequency, duration, physical proximity, depth, and breadth. Frequency of contact can be considered the “*how often*” dimension and is defined as “how often the job provides opportunities to interact with beneficiaries” (Grant, 2007, p. 398). Duration of contact can be considered the “*how long*” dimension and is defined as “the length of time for interactions with beneficiaries [provided by the job]” (Grant, 2007, p. 398). Physical proximity of contact can be considered the “*how close*” dimension and is defined as “the degree of geographic and interpersonal space in the interaction [provided by the job]” (Grant, 2007, p. 398). Depth of contact can be considered the “*how deep*” dimension and is defined as “the degree to which the job enables the mutual expression of cognitions, emotions, and identities” (Grant, 2007, p. 398). Finally, breadth can be considered the “*how many*” dimension and is defined as “the range of different groups of beneficiaries the job places in communication with the employee” (Grant, 2007, p. 398). Take, for example, a nurse in the intensive care unit of a hospital. He or she would be said to have a job that is high in frequency, duration, physical proximity, depth, and breadth. On the other hand, a flight attendant would be said to have a job with high frequency, physical proximity, and breadth but low duration and depth.

Effects on employee prosocial motivation, behavior, and cognitions. When taken together, impact on beneficiaries and contact with beneficiaries affect employee perceptions of overall impact on beneficiaries (Grant, 2007). Specifically, Grant (2007) proposed that the greater the job is in dimensions of impact on and contact with beneficiaries, the stronger the employees’ perceptions of impact on beneficiaries will be. He argued that it is this perceived impact that results in employees’ increased motivation to make a prosocial difference on the job,

which in turn results in positive work behaviors (effort, persistence, and helping behavior). Moreover, according to Grant (2007), these positive work behaviors are related to employee cognitions, specifically their perceived competence, social worth, and self-determination.

Affective commitment to beneficiaries. Proposed as a moderator for the relationship between employees' perceived impact on beneficiaries and their motivation to make a prosocial difference, Grant (2007) defined affective commitment to beneficiaries as "the emotional concern for and dedication to the people and groups of people impacted by one's work" (p. 401). It is characterized by a desire to improve the welfare of specifically one's beneficiaries. Building on prior research suggesting that frequency, duration, physical proximity, depth, and breadth of one's contact with others increases affective commitment to them, Grant (2007) also argued for affective commitment to beneficiaries as another outcome of contact with beneficiaries.

As a whole, Grant's (2007) relational job design model echoed efforts made by job embeddedness researchers to establish relationships that might bind an employee to his or her organization. Specifically, the relational job design and focus on relationships with beneficiaries resembles the links dimension of job embeddedness. Moving forward in this dissertation, I will propose the various mechanisms by which relational job design and job embeddedness operate together to increase employee retention.

Testing the relational job design. The early studies on relational job design involved establishing various links in the overall model. One of the first studies to apply and test Grant's (2007) relational job design focused on perceived impact on and contact with beneficiaries (Grant, Campbell, Chen, Cottone, Lapedis, & Lee, 2007). Over the course of three studies, Grant and colleagues (2007) established relationships between contact with beneficiaries and employee persistence behavior. Their study showed that persistence behavior could be increased by

redesigning jobs to increase their relational nature, regardless of whether or not employees actually communicated with beneficiaries or not. Specifically, they found that both respectful communication with the beneficiary and the mere presence of the beneficiary positively impact employee persistence. Interestingly, they also found that while the relationship between respectful communication with the beneficiary and employee persistence was mediated by perceived impact on the beneficiary, the relationship between the beneficiary's mere presence and employee persistence was mediated by affective commitment. These results served as initial evidence in support of the positive results gained from redesigning jobs to increase their relational nature. Moreover, they also demonstrated that different levels of contact with beneficiaries (direct interaction versus mere contact) are related to positive employee behaviors through different mechanisms.

Building on Grant et al.'s (2007) study, Grant (2008) turned his focus to employee perceptions of the social impact of their jobs in an effort to tease apart the effects of job significance versus relational mechanisms (perceptions of social impact and social worth) on job performance. Through a series of studies, Grant (2008) demonstrated that the relationship between task significance and job performance is mediated by employee perceptions of both the social impact and social worth of their jobs. Highlighting the difference between task significance and social impact as opportunities versus feelings about one's own actions, Grant (2008) argued that task significance cultivates perceptions and psychological connections "between...actions and potential positive outcomes for others" (p. 110), which in turn affects employees' perceptions of social impact and engagement in behaviors to achieve desired outcomes. Similarly, jobs high in task significance, by design, allow employees to engage in actions that have a lasting impact on others and increasing the likelihood that they would receive

feedback about the social worth of their job (Grant, 2008). This relationship between task significance and job performance, Grant (2008) further demonstrated, was affected by employees' individual differences – conscientiousness and prosocial values. As a result, Grant's studies established perceptions of social impact and social worth as important relational mechanisms explaining employee job performance and helped to explain the lack of consensus in the field regarding the nature of the task significance – job performance relationship.

Despite being a relatively new framework, the relational job design model has found merit in explaining how relationally designed jobs yield positive outcomes by affecting the employees' psychological states. These two early studies soundly established the importance of relational mechanisms in explaining employee performance, and, to an extent, touched on every component of Grant's (2007) model. Still, there is a need to examine the specific relationships employees build with their beneficiaries, their affective commitment to beneficiaries, and how the dimensions of contact and job impact on beneficiaries affect employee behaviors.

Organizational Commitment

As reviewed earlier, organizational commitment has been another long-standing, accepted antecedent of turnover. Until recently, the most commonly accepted model of organizational commitment was Meyer and Allen's (1991) three-component conceptualization. In an effort to bridge the divide between the attitudinal and behavioral perspectives of commitment, their seminal work categorized organizational commitment into three components based on psychological states: a desire to stay (affective commitment), a need to stay (continuance commitment), and an obligation to stay (normative commitment). Their approach shifted organizational commitment from an attitude to a psychological state (Meyer & Allen, 1991) and integrated the attitudinal and behavioral approaches to measuring organizational

commitment. Specifically, Meyer and Allen (1991) argued that affective commitment is affected by “personal characteristics, structural characteristics job-related characteristics, and work experiences” (p. 69) whereas continuance commitment is affected by perceived costs, investments, and available alternatives and normative commitment is affected by internalization of pressure to stay with the organization, which could be self-induced or organization-induced.

Yet, despite the wide acceptance of the three-component conceptualization of organizational commitment, there has been some recent work on re-conceptualizing the construct to address hidden assumptions and isolate it from various confounds. Klein et al. (2012) highlighted two assumptions held by the traditional approach to commitment: “all workplace bonds are commitment, and commitment to the employing organization is generalizable to all other workplace targets” (p. 130). Their re-conceptualization of organizational commitment teased apart types of organizational bonds, one of which they identified as commitment, and introduced the notion of a target for the specific bond. As such, Klein et al. (2012) defined commitment as “a volitional psychological bond reflecting dedication to and responsibility for a particular target” (p. 137), mapped it on a continuum of psychological bonds, and presented a process model for the development of commitment.

At the core of Klein and colleague’s (2012) new model of commitment is challenging the underlying assumptions regarding generalizability of organizational commitment to all targets and the kinds of bonds that can also be formed but would not be considered commitment. Citing early research arguing that commitment can be directed to multiple targets (Reichers, 1985), Klein et al. (2012) emphasized the importance of considering other targets of commitment given the more recent shifts in approaches to understanding employment relationships and the nature of work. Their model took into consideration how employees might be more committed to specific

projects, teams, or goals rather than the organization itself and expands the scope of commitment such that it maintained relevance to more recent work in which commitment to the organization is deemed to be irrelevant or unimportant.

Distinctiveness of the commitment bond. By conceptualizing commitment as only one of several types of bonds employees could build in the workplace, Klein et al. (2012) alleviated issues related to confounded definitions and measures. They proposed that commitment is one of four bonds that can be mapped onto a discontinuous continuum and identify acquiescence, instrumental, and identification as the three other bonds that fall on this continuum alongside commitment. Consequently, Klein and colleagues (2012) presented commitment as a distinctive and unique construct from the other three bonds. Specifically, they argued that commitment does not involve merging oneself with the target (compared to identification) but requires a degree of consideration and care for the target (compared to instrumental) and is volitional (compared to acquiescence).

Commitment, according to Klein et al. (2012), is a psychological state that requires the voluntary acceptance of responsibilities for and a dedication to a particular target. Whereas attitudes are affected by evaluations of the target, dedication to a target is void of affective influences and conceptually allows for the examination and explanation of the observed reciprocal relationship between attitudes, such as satisfaction with a target and the volitional decision to commit to said target (Klein et al., 2012). Additionally, conceptualized as a psychological state, commitment is viewed as dynamic and socially constructed within the individual such that the degree of commitment can change over time. Whereas prior conceptualizations of commitment involved static measures of different dimensions of

commitment, Klein et al.'s (2012) definition acknowledged that future interactions (or lack thereof) with the target can change the degree to which one is committed to the target.

Finally, perhaps the most notable distinction of commitment as defined by Klein et al. (2012) is that it is target-neutral. Each of the more traditional conceptualizations of commitment tailor it to a specific target – the organization or a sub-group, for example. However, because the definition proposed here alleviates the assumptions associated with a specified target, individuals can be simultaneously committed to various targets. Moreover, measurement of commitment to these various targets will not confound one another, and it accounts for varying degrees of commitment to different targets.

The process model of commitment. In addition to redefining commitment as a specific and distinctive type of bond to any target, Klein et al. (2012) proposed a process model by which employees can develop commitment towards any target in the workplace. The model considered various commitment antecedents and laid out both cognitive and affective processes that affect employees' degree of target commitment and ultimately commitment outcomes. The following section briefly summarizes the model.

Klein et al. (2012) argued that commitment to a target results from a combination of cognitive and affective processes that lead to a perceived bond and an experienced bond with the target, and they emphasize the importance of acknowledging commitment as a function of how the employee perceives the target and the environment. In this regard, they highlighted four factors that influence employee perceptions of the target and environment: salience, affect, trust and control. Drawing from field theory (Lewin, 1951), Klein and colleagues (2012) argued that bond strength is affected by the extent to which employees' reactions to their environment are influenced by the elements that are of closest psychological proximity. The more salient

elements are weighed more in employees' sensemaking, and they influence commitment bond formation more heavily than less salient elements do. Affect, on the other hand, contributes to the decision to dedicate oneself to a particular target; employees are more likely to develop commitment towards a more positively-evaluated target. Similarly, certain levels of trust in the target is necessary for employees to dedicate themselves to the target and take on responsibilities associated with the target's well-being. Finally, employees' perceptions of control affect their commitment bond because they influence employees' confidence in their ability to reap positive outcomes.

According to Klein et al.'s (2012) process model, the cognitive and affective processes associated with evaluating the target and environment are affected by various antecedents associated with the employee, the target, the organization, and society. At the individual level, Klein et al. (2012) argued that individual differences in personality and values predispose certain individuals to evaluate the target and environment in ways that allow them to form commitment bonds more readily than others. With regards to the target, the nature of the target – such as an organization versus a person – and closeness of the target affect perceptions and evaluations. As such, Klein et al. (2012) also identified social influences and exchanges as interpersonal factors that contribute to perceptions of the target and environment, and they posited that factors such as leader-member exchange and perceived organizational support impact the evaluations being made.

At a higher level, organizational factors such as organizational culture, climate, and human resource practices influence employees' evaluations and perceptions of the organization in which its commitment bonds are formed. As such, the existence of subcultures, lack of safety or justice, and few opportunities for rewards and socialization can negatively contribute to the

formation of commitment bonds to various targets (Klein et al., 2012). Finally, cultural and economic factors at the societal level can influence employees' evaluations. The larger society in which the organization is located can influence both the employees who are evaluating the targets and environment and the environment itself, rendering some factors affecting perceptions more important than others. For example, employees who find themselves in high power-distance societies may weigh evaluations of trust in the target or environment more heavily than other factors, and they may also be more inclined to develop commitment bonds to certain targets over others.

Klein and colleagues' (2012) target-neutral conceptualization of commitment allowed their process model to consider how commitment to *other* targets would affect the degree of commitment to the focal target and behavioral outcomes. Specifically, commitment to other targets is viewed as a moderator of these relationships and are argued have the potential to both positively and negatively moderate the relationships in the process model. Although it is possible for employees to have multiple commitment bonds to various targets, there are limitations and contingencies. On the one hand, employees have limited resources to expend in behaviors influenced by their commitment bonds and may even experience a conflict of interest. On the other hand, if commitments are complementary in ways that alleviate resource depletion and instead create synergies, the commitment process relationships may be accentuated. Consequently, the number of targets to which employees are committed effect each individual commitment bond to the extent that they conflict one another (Klein et al., 2012). Competing commitment bonds will weaken the formation of commitment to conflicting targets whereas synergistic commitment bonds will strengthen the formation of commitment bonds to targets. As a result, an employee whose commitment targets compete with each other or conflict in demands

of resources is likely to have fewer commitment bonds or exhibit lower levels of outcomes behaviors associated with commitment bonds (Klein et al., 2012). In such cases, it is likely that employees will have to choose between the conflicting targets to form commitment bonds with only a subset of those targets.

Finally, the specific outcomes addressed by Klein et al. (2012) were continuation, the intentions and behavioral exhibitions of remaining with the target, and motivation, the willingness to make sacrifices when allocating resources in favor of the target. Both outcomes reflect employees' decisions to remain committed to the target and engage in behaviors that increase their well-being, and translate into action, a secondary outcome that is viewed to be more distal from commitment. As such, action does not necessarily have to result from commitment (Klein et al., 2012), and it is not specified or limited to specific activities or behaviors. Nevertheless, continuation, motivation, and action all serve as feedback for employees' evaluations of the target and environment, creating a feedback loop that "reflects the dynamic nature of commitment" (Klein et al., 2012, p. 144).

Social Networks

A network is defined as "a set of actors connected by a set of ties" in which actors are the individuals that make up the network and ties are a specific type of directional, dichotomous, or valued connections between the individuals (Borgatti & Foster, 2003, p. 992). Using data collected about a given social network, various indicators of placement (e.g., centrality) in the social network can be calculated for each actor, and assessments of the network as a whole (e.g., density) can also be made. Because each social network is defined by a specific type of connection between actors (e.g., friendship, advice-seeking), the shape and structure of a social network is contingent upon network type and the level of analysis. For example, the formal

network of employees in an organization is likely to look very different from the friendship network of employees in the organization. This is because employees may not necessarily identify their direct reports or supervisors as their friends. Consequently, network ties have a degree of multiplexity, or a “thickness” that reflects the relational content of the tie (Campbell, Marsden, & Hurlbert, 1986; McPherson, Smith-Lovin, & Cook, 2001) as networks are layered on top of each other.

Conceptually, the links dimension of job embeddedness resembles social networks in that it, in part, captures the number of connections an employee has with others in the organization. However, links are different from the traditional social network ties in that the nature of the links is not taken into consideration when assessing job embeddedness. Indeed, the items Mitchell et al. (2001) developed in their seminal work introducing job embeddedness do not differentiate between the types of interactions employees have with their coworkers. Traditional social network items would specify the nature of employees’ connections to their coworkers, resulting in a specific type of network. Thus, adopting a social network approach to evaluating the links dimension of job embeddedness would be in line with the conceptualization of links but would provide more specific information about those links.

When measuring social networks, researchers can choose from three levels of analysis: the dyadic level, the ego network, and the whole network (Zaheer, Gözübüyük, & Milanov, 2010). The dyadic level of analysis focuses on the specific nature and characteristics of the relationship between two actors in the network and the strength of these ties (Zaheer et al., 2010). It ignores the overall network in which the ties between actors exist and instead highlight the relational embeddedness of each actor in relation to other actors in the network. For example, the dyadic level of analysis would assess the strength of a friendship tie between a focal

employee and a coworker or the degree of trust the focal employee has for a coworker. Each coworker would be given a measure of tie strength and outcomes of interest include continuation of the relationship, information sharing, and the likelihood of dissolving the relationship (Zaheer et al., 2010).

The second level of analysis is the ego network, which, like the dyadic level, focuses on gathering data on the ties of a focal actor (the ego) to other actors (alters). However, unlike the dyadic level, the ego network level of analysis also pieces together each dyadic relationship to produce a network of relationships involving the ego (Hanneman & Riddle, 2005). Ego networks allow researchers to study the effects resulting from the ego's connections to others and the ego's position in the network, focusing on the structure of the relationships around the ego rather than the characteristics of each of those relationships (Zaheer et al., 2010). The most common approach to assessing an ego network is to identify the most important or prominent individuals of the network (Wasserman & Faust, 1994; Zaheer et al., 2010). Because relationships can be given a direction – from the ego to the actor (out-ties) or from the actor to the ego (in-ties) – Knoke and Burt (1983) argued that prominence can be measured in two ways: centrality and prestige. Whereas the centrality measure served as an indicator of the number of out-ties the ego chooses to “send,” prestige is measured by the number of in-ties the ego “receives” (Knoke & Burt, 1983; Zaheer et al., 2010).

However, given that ego networks focus on the ego's connections and is most often created using ego self-reports, centrality is the more common measure of the two prominence measures. There are various kinds of centrality measures that can be calculated using the ego network data. The most basic is degree centrality, which refers to the total number of connections the ego has to alters; high degree centrality indicates that the ego has many direct

connections to alters (Wasserman & Faust, 1994). A degree centrality measure would be calculated for each ego, and research using degree centrality would often make comparisons among egos' scores. A problem with this method of analysis is that it assumes each ego network is isolated when, in fact, the egos in each network are also very likely to be alters in one another's networks. To account for this issue, Bonacich (1972) developed a measure of degree centrality that takes into consideration the centrality of the alters in an ego's network. Specifically, Bonacich's measure produced a degree centrality measure that accounts for the alter's centrality and its effect on the ego's centrality by weighting alters' centrality scores (Bonacich, 1972; Zaheer et al., 2010).

Bonacich's (1972) approach to measuring an ego's degree centrality demonstrated how ego networks can be connected together to create a larger, overall network. This larger network is the third level of analysis, the whole network. The focus at this level is typically on the characteristics and behavior of the entire network of actors in the organization(s). Common measurements used at the whole network level of analysis include centralization, which measures how centralized the network is around certain actors (Hanneman & Riddle, 2005; Wasserman & Faust, 1994), and "small-worldness," or the clusters or dense subgroups or cliques in the network (Barabasi, 2002; Watts, 1999; Zaheer et al., 2010).

Operating at the whole network of analysis also allows researchers to explore other structural components of the networks, such as structural holes and closure. Structural holes in a network exist when two actors in the network are both connected to a third actor but not directly connected to each other (Burt, 1992; Hanneman & Riddle, 2005). Although structural holes can be found when piecing ego networks together, missing information from ego networks may result in misidentification of structural holes. Consequently, because the whole network level of

analysis allows for a more comprehensive view of all relationships in the network, researchers can identify structural holes in whole networks with more confidence. The importance of structural holes lies in the effects it has on the third actor to whom two actors are connected. Because the two focal actors are not directly connected to one another, the third actor in this small network is more likely to gain more information and control more benefits compared to other actors who are in closed networks where all three actors are directly connected to one another (Burt, 1992; Zaheer et al., 2010). On the other hand, networks with high closure, or a high number of direct ties between each of the actors in the network, are said to be highly dense networks, which can affect the knowledge sharing that takes place in the network and overall performance (Zaheer et al., 2010).

To a large extent, the structural components and analyses discussed at the whole network of analysis can be applied to the ego network under the condition that data collected about ego networks is entirely complete or if missing data could be calculated with confidence using the existing network data. While ego networks can be extracted from whole networks for analysis, conclusions about the whole network cannot be made with only the ego network data for one or just a few focal employees. The whole network requires piecing together the ego networks of *all* individuals involved in the organization. Moreover, although analyses conducted at the whole network level allow researchers to draw more specific and detailed results out of social networks using more powerful forms of social network analyses, data for whole networks are often difficult to obtain. Social network analyses are particularly sensitive to effects of missing data (Neal, 2008) because missing data can result in grossly inaccurate representations of the true underlying structure of the network. Unlike traditional responses to items, social network responses serve as a means for building a visual representation of an actor's connections to

coworkers; missing data from even a few actors can result in the loss of an exponential amount of connections in the network.

To date, research on job embeddedness, relational job design, and organizational commitment has not adopted a whole network approach to understanding how the relational architecture of the job affects employees' decisions to commit to various targets and ultimately their behaviors and performance. Instead, employees are asked to identify the individuals to whom they are connected, to whom they are committed or with whom they come into contact or interact. For example, Lee et al. (2004) collected job embeddedness data on each individual employee and calculated a composite score for each employee but did not map out whole network structure using this data. This focus on the dyadic level of interactions provides a limited understanding of employees' work behaviors and retention as outcomes of the nature of their relationships with others. On the other hand, by adopting an ego network approach and highlighting the individual connection employees has to each beneficiary, I can shed light onto how contact with beneficiaries impacts employees' formation of commitment links to coworkers and clients and how the distribution of these commitments impact desired outcomes of retention and performance.

Moreover, although each of the three models reviewed – job embeddedness (Mitchell et al., 2001), relational job design (Grant, 2007), and the process model of commitment (Klein et al., 2012) – attempt to address how employees may be retained in the organization, there are limitations to each of these models. Though the job embeddedness model embraces the idea that relationships to others affect decisions to stay with the organization, it neglects to consider the *nature* of employees' links to other and consequently assumes all links are equal. The relational job design model, while it highlights how direct contact with individuals affects employees'

commitment to them, fails to consider how beneficiaries might be grouped and the proximal effects of committing to members of one group versus another. Finally, the process model of commitment, though it advances our understanding of commitment as a psychological bond independent of identification with a target, ignores how other types of relationships with targets may moderate the effects of commitment bonds on outcomes. Moving forward, I aim to address these limitations with the development of a theoretical framework that integrates elements of each model.

THEORY AND HYPOTHESES

The purpose of this dissertation is to integrate job embeddedness, relational job design, and the process model of commitment to present and test a theoretical framework that adopts a network approach to understanding how specific relationships affect retention and performance outcomes. Figure 1 presents the proposed model, and the theoretical arguments are presented in the following sections.

Predicting Commitment Bond Formation

Grant's (2007) model argued that contact with beneficiaries results in employees' affective commitment to beneficiaries. Specifically, contact with beneficiaries is posited as a component of the relational architecture of jobs that "enhances the motivation to make a prosocial difference by enabling employees to perceive their impact on, and become attached to, these beneficiaries" (Grant, 2007: p. 396). Therefore, interacting with beneficiaries can help shape employees' understanding about the impact their job has on beneficiaries. Moreover, contact with beneficiaries shapes employees' perceptions and understanding of others and their working environment (Klein et al., 2012). Drawing from field theory (Lewin, 1951), Klein et al. (2012) argued that employees' psychological proximity to their surroundings makes elements of their environment more salient, thus contributing to the development of their commitment bonds. Consequently, the beneficiaries with whom employees have contact are likely to be more salient in the work environment, and their interactions with beneficiaries trigger affective and cognitive processes by which employees decide to commit to beneficiaries.

Although Grant (2007) specifically theorizes about how contact with beneficiaries is related to affective commitment, I argue that Klein et al.'s (2012) definition of commitment as a psychological bond reflecting of a level of dedication to the beneficiary rather than a liking of or

an attitude towards the beneficiary is a more appropriate definition to adopt when examining how contact with beneficiaries results in the development of commitment for two reasons. First, the conceptualization of commitment as a psychological bond eliminates the attitudinal and emotional component affiliated with affective commitment and focuses on the volitional dedication to the beneficiary rather than an evaluation of the target (Klein et al., 2012). Second, as affective commitment incorporates the notion of identifying with the target (Meyer & Allen, 1991), by adopting Klein et al.'s (2012) definition of commitment, it is possible to distinguish between the psychological bonds of commitment and identification.

Nevertheless, Grant (2007) does identify elements of contact with beneficiaries that are likely to affect employees' decisions to form commitment bonds with beneficiaries: frequency, duration, physical proximity, depth, and breadth. In the proposed model, only the impact of direct contact with individual beneficiaries on bond formation is considered to first establish how face-to-face interactions with individuals impact decisions about forming commitment bonds. As a result, physical proximity and breadth are not included in the theorized model presented here. Physical proximity, the "geographic and interpersonal space in the interaction," requires variability in distance between the employee and the beneficiary (Grant, 2007, p. 398), but will be held constant in this study. Breadth of contact refers the variety of different beneficiary *groups* with whom the employee interacts as a result of his or her job (Grant, 2007), but the focus on how direct contact with individuals affects employees' commitment bond formation to these individuals eliminates the group-level. Moreover, physical proximity and breadth of contact most closely relate the job itself – the extent to which the job allows for close versus distal physical proximity of contact and wide versus narrow breadth of contact – rather than the nature of actual direct contact with beneficiaries. Consequently, the proposed model considers

only the remaining three characteristics of contact: frequency, depth, and duration. Frequency and duration of contact speaks to the contact quantity (time) of employees' direct interaction with beneficiaries whereas depth addresses the quality of the time spent interacting with beneficiaries. It should be noted that quality does not refer to the valence of interaction; rather, it refers in information richness and the sharing of one's personal identity to connect with a beneficiary beyond a superficial level.

Frequent contact with beneficiaries gives an employee multiple opportunities to interact with beneficiaries and witness how his or her job impacts their lives (Grant, 2007). Each instance of contact provides the employee with information about how his or her job might alleviate concerns for a coworker or how it relates to the coworker's job. Likewise, repeated contact with customers can illuminate the value of one's job in satisfying customers' concerns or in the services offered. Research has demonstrated that contact with others can increase the degree to which people are concerned for others (e.g., Batson, 1987), and a level of caring for others, necessary for the development of a commitment bond (Klein et al., 2012), may develop. Consequently, having frequent contact with beneficiaries is likely to increase employees' commitment bond formation.

Similarly, the depth of contact employees have with their beneficiaries is likely to be related to their decisions to form commitment bonds. Depth refers to how much an employee's interactions with his or her beneficiaries allow the employee and beneficiary to express their thoughts, feelings, and identities (Grant, 2007). The more the employee and beneficiary are able to express themselves cognitively and emotionally during an interaction, the deeper the interaction (Grant, 2007) and the more likely it is that the interaction is memorable. These memorable interactions contribute to the beneficiary's salience in the employee's environment

and the weight given to the beneficiary when it comes time for the employee to make a decision about forming a commitment bond with him or her. As such, it is likely that deeper interactions with beneficiaries will result in the formation of commitment bonds with said beneficiaries.

Finally, the duration of contact with beneficiaries, or the length of the interactions an employee has with a beneficiary, is likely to also affect commitment bond formation. This is because extended interactions provide employees with the time to gather even more information about how their job impacts their beneficiaries, possibly observing the effects over time. Moreover, the additional time can enable employees to develop close relationships with beneficiaries (Gutek, Bhappu, Liao-Troth, & Cherry, 1999) and a sense of caring for them. As a result, longer interactions are likely to encourage the formation of commitment bonds. For these reasons, I hypothesize:

Hypothesis 1: Frequency of contact is positively related to commitment bond formation to (a) coworkers and (b) clients.

Hypothesis 2: Duration of contact is positively related to commitment bond formation to (a) coworkers and (b) clients.

Hypothesis 3: Depth of contact is positively related to commitment bond formation to (a) coworkers and (b) clients.

The Moderating Role of Contact Evaluation

Up to this point, the relationships between employees' contact with beneficiaries and commitment bond formation has assumed that interactions between employees and beneficiaries encourage the development of a psychological bond. However, it is important to note that not all frequent, long or deep contact with others may be conducive to the formation of commitment bonds. Take for example, a situation in which an employee frequently interacts with a belligerent

coworker or the case in which an employee tends to a disagreeable customer for a long period of time. In both situations, it would be likely that the employee's contact with the beneficiary would be a negative experience, one that is not likely to encourage him or her to form a commitment bond to the beneficiary.

Indeed, Klein et al. (2012) argues that "target satisfaction generally influences commitment because individuals are more likely to commit to positively evaluated targets" (p. 138), and commitments are formed based on the employee's sensemaking and perceptions of situations. The decision to form a commitment bond lies within his or her evaluations of the beneficiary and their interactions. As such, the evaluation of contact with beneficiaries provides employees with the information by which they form perceptions about beneficiaries. Positive interactions with beneficiaries are likely to strengthen the relationship between contact and commitment bond formation whereas negative interactions with beneficiaries is likely to weaken the relationship. Therefore, I hypothesize:

Hypothesis 4: The evaluation of contact with a beneficiary moderates the positive relationship between frequency of contact and commitment bond formation to (a) coworkers and (b) clients such that the relationships are stronger when evaluation is high versus low.

Hypothesis 5: Evaluation of contact with a beneficiary moderates the positive relationship between duration of contact and commitment bond formation to (a) coworkers and (b) clients such that the relationships are stronger when evaluation is high versus low.

Hypothesis 6: Evaluation of contact with a beneficiary moderates the positive relationship between depth of contact and commitment bond formation to (a) coworkers and (b) clients such that the relationships are stronger when evaluation is high versus low.

Commitment Bonds to Specific Beneficiary Groups

Klein and colleagues (2012) argue that commitment is a target-neutral psychological bond individuals can form with any specific foci, challenging the assumptions of prior research on commitment, which has typically generalized organizational commitment to all other workplace targets. Their argument highlights the importance of considering the specific beneficiaries to whom the focal employee may form commitment bonds because committing to different beneficiaries may trigger different kinds of behavior. Indeed, being committed to different targets that may find themselves in conflict with one another, such as a union and the organization, can have implications for employee behavior within the organization (Klein et al., 2012). Likewise, being committed to beneficiaries who belong in different groups can result in employees finding themselves met with conflicting demands.

While beneficiaries can be categorized into groups in various ways, I propose that the simplest categorization would be based on their affiliation with the organization. Specifically, beneficiaries can be categorized into two groups: internal to the organization and external to the organization. Beneficiaries who are internal to the organization are the individuals that are directly affiliated with the organization. Employees are likely to identify them as peers or others who are working for the organization in some capacity. On the other hand, beneficiaries who are external to the organization are indirectly affiliated with the organization as individuals who benefit from the organization and, more specifically, the focal employee's job. Employees would likely identify these individuals as clients, patients, and customers.

Whereas prior research has measured employees' commitment to groups by approaching a group as the target of commitment, aggregating the individual commitment bonds employees form with various beneficiaries provides a more accurate representation of employee's

commitment to the group as it is a compilation of individual commitment bonds rather than an assessment of employees' commitment to the general group. Moreover, it enables the exploration of which focal beneficiaries might be driving the employee's commitment to the group as a collective, allowing for inferences to be made about the social network of an employee's commitment bonds and the outcomes associated with being committed to specific individuals within the network. Moving forward, internal beneficiaries will be referred to as *coworkers*, and external beneficiaries will be referred to as *clients*.

Outcomes of Commitment to Coworkers and Clients

Decades of research on commitment and turnover have demonstrated that employees are less likely to engage in withdrawal behaviors (e.g., absenteeism, thoughts of quitting, intention to quit) or voluntarily turnover when they experience affective, normative, and continuance commitment towards the organization (Solinger et al., 2008; Somers, 1995). We also know that employees' occupational commitment is related to positive work behaviors, such as job involvement and job performance, as well as positive attitudes, such as job satisfaction (Lee, Carswell, & Allen, 2000). Prior research has already demonstrated that commitment to the job or specific individuals related to the job is positively related to performance (Becker, Billings, Eveleth, & Gilbert, 1996; Somers & Birnbaum, 1998), and other research has suggested that the high levels of internalization associated with committing to a target results in prosocial behaviors (O'Reilly & Chatman, 1986).

However, both research on organizational commitment and occupational commitment focuses on entities as targets of commitment, ignoring the people with whom employees might interact as they execute their job tasks within the organization and the effects they might have on outcomes. Effectively, prior research ignores employees' commitments to other targets affiliated

with the organization (e.g., peers, subordinates, supervisors) or occupation (e.g., customers or clients). Because these individuals, compared to the organization or occupation, are more proximal to employees and directly benefit from employees' job performance, there is value in examining how employees' commitments to coworkers and clients affect turnover and performance outcomes.

Klein et al. (2012) argue that commitment results in "intentions to continue with the target" and behaviors that indicate employees "sticking with" those to whom they are committed (p. 143). These outcomes are embodied in employees' retention and intentions to remain, both of which demonstrate the continuance described by Klein et al. (2012). Indeed, as organizational commitment has repeatedly been demonstrated to be negatively related to turnover (Mathieu & Zajac, 1990; Tett & Meyer, 1993), the commitment bonds to specific individuals are likely to result in similar behaviors and cognitions. Because coworkers are others employed by the organization alongside whom the focal employee works, they are likely to have a particular impact on the focal employees' decisions about remaining with the organization and thoughts about leaving the organization (Bartunek, Zhi, & Walsh, 2008). Indeed, Felps et al. (2009) found that coworkers' job search behaviors affected the focal employee's own turnover, and Heavey, Holwerda, and Hausknecht's meta-analysis (2013) showed that work group cohesiveness and supervisory relationships predicted collective turnover.

I argue that coworkers represent the organization before the occupation for two reasons. First, an organization employs employees for different job positions with widely varying job descriptions. For example, a secretary's job responsibilities lie in administrative duties whereas a janitor is responsible for building maintenance. Second, given the variety of jobs in an organization, coworker's affiliation with the focal employee is through the organization, not his

or her occupation. Research has shown that employees are affected by the turnover culture created in the organization by the very employees who are employed there through shared perceptions and emotional contagion (Bartunek et al., 2008). Consequently, the most proximal outcome of commitment to coworkers is likely to be turnover; before employees can perform on the job, they must be employed by an organization in a job. As a result, I hypothesize:

Hypothesis 7: The formation of commitment bonds with coworkers will be positively related to (a) retention and (b) intentions to remain.

However, retaining employees is not necessarily the end-all, be-all for organizations. Research on functional and dysfunctional turnover (Dalton et al., 1981; Dalton et al., 1982) and turnover functionality (Hollenbeck & Williams (1986) suggest that retaining a poorly performing employee or one who is not motivated on the job is not beneficial to the organization. Consequently, it is likely that employees who are committed to the clients who directly benefit from their performance on the job yield the greatest value for organizations. Klein and colleagues (2012) argue that “commitment results in a willingness to make trade-offs in favor of the target when allocating resources such as time and attention” and, more distally, action (p. 143). Spurred by their sense of responsibility for and dedication to their clients, it is likely that employees may act in ways that would directly benefit their clients.

Specifically, they are likely to dedicate their resources and carry out their job tasks to ensure that they uphold their responsibility on the job to their clients. Moreover, they are likely to engage in prosocial behaviors, or actions that are generally defined as beneficial to others (Penner, Dovidio, Piliavin, & Schroeder, 2005) because their commitment to their clients may lead them to allocate their time, attention, and other resources to support them (Klein et al., 2012). Given that clients directly benefit from their job, employees are likely to continue

performing well by executing the tasks associated with the job (Klein et al., 2012).

Consequently, I hypothesize:

Hypothesis 8: The formation of commitment bonds to clients is positively related to (a) job performance and (b) prosocial behaviors.

Effects of an Employee's Distribution of Commitment Bonds

Because the formation of commitment bonds and the targets of those commitment bonds are at the employee's discretion (Klein et al., 2012), it is important to note that the number of coworkers versus clients to whom an employee commits will vary. Arguments surrounding Dunbar's number suggest that one's capacity to handle multiple relationships is limited and capped after a certain point (Dunbar, 2010), and theories on resource depletion argue that individuals have a limited set of resources from which they draw throughout the day as we interact with individuals. This suggests that different proportions of commitment to coworkers versus clients may yield varying levels of relationships with turnover and performance outcomes.

Specifically, given a "cap" on the number of commitment bonds they could form, the distribution of employees' commitment bonds to coworkers versus clients can vary in four different ways (see Figure 2). An employee can be committed to (a) few coworkers and few clients, (b) many of coworkers and a high number of clients, (c) many coworkers and few clients, and (d) few coworkers and many clients. As argued earlier, commitment bonds to coworkers versus clients are likely to yield differing proximal outcomes. Taken together, commitment bonds to members of both groups will likely yield both turnover and performance outcomes.

However, given the variations in how an employee's commitment bonds can be distributed among coworkers or clients, the relationships between commitment to beneficiaries as a whole and turnover and performance outcomes will likely vary in strength. An organization

desires to experience functional turnover – retaining its high performers and lose its low performers (Dalton et al., 1981; Hollenbeck & Williams, 1986). According to the model presented here, functional turnover would occur when employees form commitment bonds to *both* coworkers and clients – or lack thereof. When an employee has few commitment bonds to both coworkers and clients, he or she is less likely to both remain with the organization and perform well on the job (Figure 2, cell A). This is because forming few commitment bonds to coworkers is likely to be weakly related to retention and more strongly related to intentions to r, and few commitment bonds to clients is likely to be weakly related to both job performance and prosocial behaviors. In this situation, the employee lacks the sense of dedication to and responsibility for either beneficiary, resulting in a greater propensity to leave the organization and exhibit lower performance.

On the other hand, this dual relationship between commitment bond formations and both retention and performance outcomes is likely to be maximized when an employee forms many commitment bonds to coworkers *and* to clients, resulting in the retention of high performers (Figure 2, cell B). As hypothesized earlier, commitment bond formation to coworkers is likely to be positively related to retention and intentions to remain, and commitment bond formation to clients is likely to be positively related to job performance and prosocial behaviors. Forming a high number of commitment bonds to both coworkers and clients capitalizes these hypothesized effects, resulting in a greater propensity to stay with the organization and perform well on the job. Therefore, I hypothesize:

Hypothesis 9a: Retention will be higher when the number of commitment bonds to coworkers and commitment bonds to clients are congruent and at high levels.

Hypothesis 9b: Intentions to remain will be higher when the number of commitment bonds to coworkers and commitment bonds to clients are congruent and at high levels.

Hypothesis 9c: Job performance will be higher when the number of commitment bonds to coworkers and commitment bonds to clients are congruent and at high levels.

Hypothesis 9d: Prosocial behaviors will be higher when the number of commitment bonds to coworkers and commitment bonds to clients are congruent and at high levels.

However, as the literature on functional and dysfunctional turnover would argue, there are cases when an organization may retain low performers (see Figure 2, cell C) and lose high performers (see Figure 2, cell D). In both cases, the organization experiences a loss, whether it's in human capital or in overall performance. I argue that dysfunctional turnover happens when the employee forms a disproportionately high number of commitment bonds to coworkers or clients, resulting in two combinations of undesirable outcomes. A disproportionately high number of commitment bonds formed with coworkers over clients is likely to result in strong relationships with retention outcomes but weak relationships with performance outcomes. This is because employees' sense of responsibility and dedication is directed, as a whole, towards their coworkers rather than clients.

On the other hand, a disproportionately high number of commitment bonds formed with clients over coworkers is likely to result in strong relationships with performance outcomes but weak relationships with retention outcomes. Employees whose commitment bonds are distributed in this manner are likely to experience a greater sense of responsibility for those who directly benefit from their jobs but not as much for fellow organization employees. This is particularly true for employees who hold job positions that allow for greater mobility, such as nurses and teachers. These types of jobs allow the employees to do their work at any

organization. As such, a disproportionately low number of commitment bonds to coworkers may result in higher levels of performance the employee could take to a different organization.

Consequently, I hypothesize:

Hypothesis 10a: Retention will be high when there are more commitment bonds to coworkers and few commitment bonds to clients compared to when there are fewer commitment bonds to coworkers and more commitment bonds to clients.

Hypothesis 10b: Intentions to remain will be higher when there are more commitment bonds to coworkers and few commitment bonds to clients compared to when there are fewer commitment bonds to coworkers and more commitment bonds to clients.

Hypothesis 10c: Job performance will be higher when there are fewer commitment bonds to coworkers and more commitment bonds to clients compared to when there are more commitment bonds to coworkers and fewer commitment bonds to clients.

Hypothesis 10d: Prosocial behaviors will be higher when there are fewer commitment bonds to coworkers and more commitment bonds to clients compared to when there are more commitment bonds to coworkers and fewer commitment bonds to clients.

METHOD

Participants

Participants were recruited from multiple locations of a large Mid-western assisted living organization. Initial recruitment yielded a sample of 101 participants, all who completed the pre-survey containing demographic variables. However, only 35 participants completed the study survey, resulting in additional waves of data collection. The second and third waves of data collection yielded an additional 17 participants and 23 participants, respectively, resulting in a total sample of 75 participants. However, incomplete data and missing supervisor rating data from 7 participants resulted in a final sample of $n = 68$. In the sample, 95.6% of participants were female, average age was 32.9 (range: 17-81), and average tenure with their facility branch was 2.18 years (range: 3 weeks-14 years).

Procedures

Data was collected through surveys that were administered in person or electronically. I visited each branch location to establish rapport with potential participants and collected demographic data. Due to the length of the study survey, focal variables were collected electronically through a survey distributed via email and recruitment letters sent to each branch location. Survey data was collected using a social network approach (see Appendix A). Specifically, the roster method was used in which participants are provided with a list of all branch-specific coworkers and all branch-specific clients. Participants responded to survey questions about their contact with and commitment to individual coworkers and clients as well as their intentions to remain with the organization as an employee. Branch supervisors provided objective data on retention and completed survey questions assessing each employee's job performance and prosocial behavior.

Measures

All scales and items can be found in Appendix C and Appedix D.

Controls variables. The purpose for using statistical controls in this study was to account for other possibly meaningful variables (Carlson & Wu, 2011). In light of recent work highlighting potential problems associated with statistical control (see Becker, 2005; Carlson & Wu, 2011), each control variable was carefully considered to assess its contribution to the overall purpose for their inclusion. Specifically, guidelines provided by Carlson and Wu (2011) and Becker (2005) were followed to determine which control variables should be included. By adopting a conservative stance on control variable inclusion, a more appropriate interpretation of results can be achieved (Carlson & Wu, 2011).

For the purpose of accounting for other possibly meaningful variables, a control variable should only be included if there is a logical rationale for why it could potentially be related to both the predictors and criteria (Becker, 2005; Carlson & Wu, 2011). Given the variables in the proposed model of this study, tenure was included as a control variable. How long an employee has been with the organization is directly related to the opportunities he or she has to have contact with beneficiaries. Tenure could also impact employees' decisions about turnover and performance; the longer they are with the organization, the more time they have to "learn the ropes" of their job and assess the organization as a place of employment.

Contact with beneficiaries. Using a roster of all coworkers exclusively employed at their branch location and the clients currently serviced in their respective branch, participants were asked to first indicate the individuals with whom they have come in contact during the previous two weeks. Participants then responded to questions assessing the frequency, duration, and depth of their contact with each of these individuals. Contact frequency was measured on a 7-point

scale (see Appendix A) with “*How often do you have contact with this individual?*” Contact duration was assessed using an open-ended item: “*On average, how long (in minutes) are your interactions with this individual?*” Contact depth was measured on a 7-point scale (1 = *not at all* to 7 = *to a very large extent*) with “*On average, to what extent were your interactions with each of the following coworkers personal, and not just work-related?*”

Evaluation of contact. Evaluation of contact with each coworker and client was measured using a 7-point scale (-3 = *very negative* to +3 = *very positive*) with “*On average, how would you rate the quality of your interactions with this individual?*”

Commitment bond formation. Commitment bond formation was measured in two ways. First, it was measured as a count variable with two dichotomous items (1 = *no*, 2 = *yes*): “*I voluntarily made the decision to commit (be dedicated) to this individual.*” The second measure of commitment bond formation adopted two items from a scale developed by Klein, Cooper, Molloy, and Swanson (2014): “*To what extent are you committed (dedicated) to this individual?*” (1 = *not at all*, 7 = *completely*). The inter-item correlation between these two items was $r = .79$, and coefficient alpha was $\alpha = .88$, suggesting that they both measure the same construct. Therefore, responses to these two items were averaged to produce a commitment bond strength score for each coworker and client to whom the participants indicated they were committed.

In addition to these two measures, participants distributed 100 commitment points among all coworkers and clients to whom they indicated they were committed to reflect the limitations of employees’ resource allocation. Participants were instructed to distribute all 100 commitment points in such a way as to reflect how committed they are to each beneficiary; they were free to distribute the points equally across all beneficiaries or divide the points up unequally as they felt

best indicated the extent of their commitment to each beneficiary, bearing in mind that by allocating more points to one beneficiary would result in fewer points to allocate across others.

Outcome variables. Retention data was collected using organizational records ($1 = \text{stayers}$, $0 = \text{leavers}$) obtained from each of the branch managers eight weeks after data was collected from participants. Intentions to remain was self-reported by participants and measured using an adaptation of three items from Mitchell et al. (2001) ($\alpha = .67$); a sample item is “*How likely is it that you will remain with the organization for the next 12 months?*” Job performance was measured using an adaptation of four items developed by Williams and Anderson (1990) ($\alpha = .97$; e.g., “*adequately completes assigned duties associated with care for residents*”), and four items developed by Williams and Anderson (1990) ($\alpha = .95$; e.g., “*takes a personal interest in residents*”) were adapted to measure prosocial behaviors. Both job performance and prosocial behaviors were assessed by participants’ supervisors immediately following participants’ survey completion.

Analyses

Commitment bond formation. Given that commitment bonds were nested within individuals, the data was assessed for nesting effects. Using hierarchical linear modeling (HLM), null models were estimated for commitment bond formation to coworkers and commitment bond formation for clients. Results indicated that there was significant between-individual variance in the two criterion (commitment bond formation to coworkers: $\tau_{00} = 1.67$, $\chi^2 = 671.00$, $p < .01$; commitment bond formation to clients: $\tau_{00} = 1.85$, $\chi^2 = 32469.90$, $p < .01$). Additionally, 49.7% of total variance in commitment bond formation to coworkers was within individuals, but only 5.8% of total variance in commitment bond formation to clients was within individuals. These results suggest that hierarchical modeling of the data was appropriate for testing Hypothesis 1a-

6a but not appropriate for testing Hypothesis 1b-6b. Consequently, Hypothesis 1b-6b were tested using hierarchical linear regression in which an aggregated measure of commitment bond formation was regressed on aggregated measures of predictors. Following recommendations of Cohen, Cohen, West, and Aiken (2003), predictors and interaction terms were centered to eliminate nonessential multicollinearity.

For the hierarchical linear modeling analyses, Level 1 variables included contact frequency, contact duration, contact depth, and evaluation of contact to coworkers and to clients while the control variable, tenure, was the sole Level 2 variable. Following recommendations by (Raudenbush & Bryk, 2002), all Level 1 variables were entered into models group-mean centered to eliminate between-individual variance in the estimates of within-individual effects, and tenure was grand-mean centered. Interaction terms entered to test for the moderation effect of evaluation of contact were centered and calculated manually before being entered into models uncentered. For these analyses, the averaged two-item measure of commitment was used.

Turnover and performance outcomes. Hypothesis 7a was tested using logistic regression by regressing retention (see Table 3; DV: Retention, Model 1) on the number of commitment bond formations to coworkers, and Hypothesis 7b was tested using hierarchical regression by regressing intentions to remain (see Table 3; DV: Intentions to Remain, Model 1) on the number of commitment bond formations to coworkers. Hypothesis 8ab was tested using hierarchical regression by regressing job performance (see Table 4; DV: Job Performance) and prosocial behaviors (see Table 4; DV: Prosocial Behaviors) on the number of commitment bond formation to clients. In all analyses, tenure and overall contact frequency, contact duration, contact depth, and evaluation of contact were included as control variables in step 1, and commitment bond formation to coworkers and to clients were added in step 2. Overall contact measures were

calculated by aggregating all individual contact measures (i.e., contact frequency to coworkers and contact frequency to clients) for each participant. The number of commitment bonds is the count of how many commitment bonds each participant indicated they had to individual coworkers and individual clients.

Effects of varying distributions of commitment bonds. Polynomial regression and response surface methodology (Edwards, 2002; Edwards & Parry, 1993) was used to test Hypotheses 9a-d and Hypotheses 10a-d. Each outcome variable – retention, intentions to remain, job performance, and prosocial behaviors – was regressed on five polynomial terms: commitment bond formation to coworkers (b_1), commitment bond formation to clients (b_2), commitment bond formation to coworkers squared (b_3), commitment bond formation to coworkers X commitment bond formation to clients (b_4), and commitment bond formation to clients squared (b_5). The equation being tested, with the omission of the control and contact with beneficiary variables for simplicity, is $O = b_0 + b_1I + b_2E + b_3I^2 + b_4IE + b_5E^2 + e$ where O = outcome (retention, intentions to remain, job performance, or prosocial motivation), I = number of commitment bond formation to coworkers, and E = number of commitment bond formation to clients. These regression coefficients were then used to plot three-dimensional response surface plots; commitment bond formation to coworkers and commitment bond formation to clients were plotted on the horizontal axes, and each outcome was plotted on the vertical axis.

Two conceptual reference lines – the congruence line and the incongruence line – exist on the floor of the surface plot (Edwards & Cable, 2009). The congruence line represents where the number of commitment bonds to clients and the number of commitment bonds to coworkers are equal, and the incongruence line represents where they differ from each other. Following Edwards and Cable (2009), the hypothesized congruence effects (Hypothesis 9a-9d) for equally

high or equally low number of commitment bonds to coworkers and clients was tested by assessing the slope of the congruence line ($I = E$), which determines whether the surface along the congruence line varies or remains flat. Specifically, procedures for testing linear combinations of regression coefficients (Cohen & Cohen, 1983) were used to assess the slope, calculated as $b_1 + b_2$; a positive and significant slope would support Hypothesis 9a-d.

Hypothesis 10a-d predict incongruence effects – that is, a disproportionate distribution of the number of commitment bond formations between coworkers and clients. Specifically, Hypothesis 10a and Hypothesis 10b predicted that retention and intentions to remain would be higher when the incongruence reflected more commitment bonds to coworkers versus clients, and Hypothesis 10c and 10d predicted that job performance and prosocial behaviors would be higher when the incongruence reflected more commitment bonds to clients versus coworkers. These hypotheses were tested by assessing the slope of the incongruence line ($I = -E$) calculated as $b_1 - b_2$ using Cohen and Cohen's (1983) procedures for testing linear combinations (Matta, Scott, Koopman, & Conlon, 2014). Hypotheses 10a-d would be supported if the incongruence line slope was found to be negative and significant.

RESULTS

Descriptives and Correlations

Within-individual and between-individual correlations were calculated and are reported in Table 1 and Table 2, respectively. On average, participants indicated they were committed to 8.03 coworkers ($SD = 4.33$) and 30.33 clients ($SD = 15.39$).

Hypotheses Analyses

Table 3 and Table 4 summarize the results of HLM analyses and hierarchical regression analyses conducted to test Hypothesis 1-6. Hypothesis 1 predicted that frequency of contact is

positively related to commitment bond formation to (a) coworkers and (b) clients. Results (Table 3, Model 2) showed that the relationship between contact frequency and commitment bond formation to coworkers ($B = .11, t = 1.87, p = .06$) was marginally significant. Results from hierarchical regression (Table 4, Model 2) showed that contact frequency was also a marginally significant predictor of commitment bond formation to clients ($\beta = .22, t = 1.84, p = .07$). Therefore, Hypothesis 1a and 1b were marginally supported.

Hypothesis 2 predicted that duration of contact is positively related to commitment bond formation to (a) coworkers and (b) clients. Results from HLM analyses (Table 3, Model 2) showed that the hypothesized relationship was marginally significant for commitment bond formation to coworkers ($B = .00, t = 1.83, p = .06$), but hierarchical regression results (Table 4, Model 2) showed duration of contact did not significantly predict commitment bond formation to clients ($\beta = -.03, t = -.26, n.s.$). Therefore, Hypothesis 2a was marginally supported, but Hypothesis 2b was not supported. Hypothesis 3 predicted that depth of contact is positively related to commitment bond formation to (a) coworkers and (b) clients. Results from HLM analyses showed that contact depth was positively and significantly related to commitment bond formation to both coworkers ($B = .36, t = 4.93, p < .01$; Table 3, Model 2), but results from hierarchical regression showed contact depth did not significantly predict commitment bond formation to clients ($\beta = -.06, t = -.54, n.s.$; Table 4, Model 2), providing support for Hypothesis 3a but not for Hypothesis 3b.

Hypothesis 4-6 predicted a moderating effect for evaluation of contact with beneficiaries. Specifically, these hypotheses predicted that evaluation of contact would moderate the positive relationships contact frequency (Hypothesis 4), contact duration (Hypothesis 5), and contact depth (Hypothesis 6) each have with commitment bond formation to (a) coworkers and (b)

clients such that they would be stronger when evaluation of contact was high versus low. Model 3 of Table 3 and Table 4 report the results for the HLM and hierarchical regression analyses conducted to test these hypotheses. Results (Table 3, Model 3) showed that the interaction term composed of contact frequency and evaluation of contact with coworkers was a marginally significant predictor of commitment bond formation to coworkers ($B = -.07, t = -1.75, p = .08$), but the relationship was in the opposite direction as hypothesized (see Figure 3). Simple slopes calculations (Aiken & West, 1991) showed that the slope between contact frequency and commitment bond formation to coworkers when evaluation of contact was low ($B = .16, t = 1.85, p = .07$) was more positive than the slope when evaluation of contact was high ($B = -.04, t = -.71, n.s.$). Results from hierarchical regression (Table 4, Model 3) showed that the interaction term composed of contact frequency and evaluation of contact with clients did not significantly predict commitment bond formation to clients ($\beta = -.07, t = -.59, n.s.$). Therefore, neither Hypothesis 4a nor Hypothesis 4b were supported.

Results also showed that the interaction term composed of contact duration and evaluation of contact with coworkers did not significantly predict commitment bond formation to coworkers ($B = .00, t = .07, n.s.$; Table 3, Model 3). The interaction term composed of contact duration and evaluation of contact to clients also did not significantly predict commitment bond formation to clients ($\beta = -.15, t = -.59, n.s.$; Table 4, Model 3). Consequently, Hypothesis 5a and Hypothesis 5b were not supported. Finally, the interaction term composed of contact depth and evaluation of contact to coworkers was not positively related to commitment bond formation to coworkers ($B = .02, t = .49, n.s.$; Table 3, Model 3), and the interaction term composed of contact depth and evaluation of contact to clients was also not positively related to commitment

bond formation to clients ($\beta = -.01, t = -.04, n.s.$; Table 4, Model 3). Thus, Hypothesis 6a and Hypothesis 6b were not supported.

Hypothesis 7 predicted that the formation of commitment bonds to coworkers will be positively related to (a) retention and (b) intentions to remain. Table 5 reports the results of the logistic regression and shows that commitment bond formation to coworkers was not positively related to retention ($B = .13, \text{Wald } \chi^2 = 1.35, n.s.$). Results of the hierarchical linear regression (Table 5, Model 2) conducted to test the relationship between commitment bond formation to coworkers and intentions to remain also showed no significant relationship ($\beta = -.08, t = -.52, n.s.$). Therefore, neither Hypothesis 7a nor Hypothesis 7b were supported. Hypothesis 8 predicted that the formation of commitment bonds to clients is positively related to (a) job performance and (b) prosocial behaviors. Results from the hierarchical linear regressions conducted to test these relationships are reported in Table 6. Commitment bond formation to clients was found to have no significant relationship with job performance ($\beta = .20, t = 1.42, n.s.$) or with prosocial behaviors ($\beta = .23, t = 1.61, n.s.$). Thus, Hypothesis 8a and Hypothesis 8b were not supported.

The polynomial regression analysis results used to test Hypothesis 9 and Hypothesis 10 are reported in Table 7 and Table 8. Hypothesis 9 predicted that (a) retention, (b) intentions to remain, (c) job performance, and (d) prosocial behaviors would be higher when the number of commitment bonds to coworkers and commitment bonds to client are congruent and at high levels. As shown in Model 2 of Table 7, the three second-order polynomial terms ($b_3 = \text{commitment bond formation to coworkers}^2, b_4 = \text{commitment bond formation to coworkers} \times \text{commitment bond formation to clients}, \text{ and } b_5 = \text{commitment bond formation to clients}^2$) were not jointly significant in predicting retention ($\chi^2 \text{ difference} = 4.54, df = 3, n.s.$), intentions to

remain ($F = 1.25, n.s.$), job performance ($F = .54, n.s.$), or prosocial behaviors ($F = .78, n.s.$). Moreover, the slope along the congruence line ($I = E$) was positive but not significant (slope $[b_1 + b_2] = .15, n.s.$; Figure 4) for retention and negative and not significant for intentions to remain (slope $[b_1 + b_2] = -.03, n.s.$; Figure 5). The congruence line slope was also positive but not significant for job performance (slope $[b_1 + b_2] = .04, n.s.$; Figure 6) and for prosocial behaviors (slope $[b_1 + b_2] = .02, n.s.$; Figure 7). Therefore, Hypothesis 9a, Hypothesis 9b, Hypothesis 9c, and Hypothesis 9d were not supported.

Hypothesis 10a-d predicted an asymmetrical incongruence effect for commitment bond formation to coworkers and clients on outcomes. Specifically, Hypothesis 10 predicted that (a) retention and (b) intentions to remain will be higher when there are more commitment bonds to coworkers and few commitment bonds to clients compared to when there are fewer commitment bonds to coworkers and more commitment bonds to clients. Additionally, Hypothesis 10 predicted that (c) job performance and (d) intentions to remain will be higher when there are fewer commitment bonds to coworkers and more commitment bonds to clients compared to when there are more commitment bonds to coworkers and few commitment bonds to clients.

To test these hypotheses, the slope of the incongruence line ($I = -E$) was examined. Model 2 of Table 7 shows the slope along the incongruence line was positive and not significant (slope $[b_1 - b_2] = .09, n.s.$) for retention and negative but not significant (slope $[b_1 - b_2] = -.03, n.s.$) for intentions to remain. Therefore, no support was found for Hypothesis 10a and Hypothesis 10b. Results reported in Model 2 of Table 8 show that the slope of the incongruence line was positive and not significant for job performance (slope $[b_1 - b_2] = .02, n.s.$) but negative and not significant for prosocial behaviors (slope $[b_1 - b_2] = -.02, n.s.$). Thus, Hypothesis 10c and Hypothesis 10d were also not supported.

Exploratory Analyses

Attrition analyses. In an attempt to better understand the sample, a closer look at the participants was taken. Despite obtaining an initial sample size of 101 participants, over the course of multiple data collection attempts, only 38 of these participants actually completed participation in the study. Thus, it is necessary to consider *why* such a high attrition rate was observed to rule out any systematic differences between those who chose to participate in the study and those who did not. Independent samples t-tests were conducted to compare average levels of personality dimensions, overall job embeddedness, job satisfaction, and burnout. Extraversion ($\alpha = .79$), agreeableness ($\alpha = .74$), openness to experience ($\alpha = .69$), conscientiousness ($\alpha = .85$), and emotional stability ($\alpha = .90$) were measured using the short version of the International Personality Item Pool (Goldberg, 1999). Job embeddedness was measured using the three highest-loading items ($\alpha = .89$) from Crossley et al.'s (2009) 7-item global job embeddedness scale. Job satisfaction was measured Cammann, Fichman, Jenkins, and Klesh's (1979) three-item measure ($\alpha = .78$) of overall job satisfaction. Lastly, burnout was measured with three items ($\alpha = .93$) adapted from the Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996). All items are reported in Appendix C and were measured using a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*).

Results from the independent samples t-tests showed that the group of individuals who completed the pre-survey but did not participate in the study and the group of participants who completed participation did not differ in age, openness to experience, emotional stability, job satisfaction, or burnout. However, they significantly differed in extraversion ($t_{99} = 2.63, p < .05$) and conscientiousness ($t_{99} = 2.00, p < .05$). Those who completed the pre-survey but did not

complete the study were, on average, .58 units more extraverted and .33 units more conscientious than participants who completed participation in the study. Additionally, differences in agreeableness ($t_{99} = 1.71, p < .10$) and job embeddedness ($t_{99} = -1.86, p < .10$) between the two groups were marginally significant; those who completed their participation in the study after completing the pre-survey were, on average, .23 units less agreeable but .55 units more embedded in the organization than those who did not participate in the study despite completing the pre-survey.

Commitment measures. Additionally, given that the proposed analyses yielded results that challenge long-standing and accepted relationships between commitment and outcomes established from prior research, exploratory analyses were conducted to explore possible measurement effects. In these analyses, data was re-analyzed using two additional measures of commitment to determine how relationships between commitment and outcome variables might differ based on the method and instrument of measurement. Specifically, the analyses conducted to test Hypothesis 7-10 were repeated using two different measures of commitment. In the first analysis, outcomes were regressed on average commitment strength to coworkers and average commitment strength to clients, which were calculated by averaging commitment strength scores to all coworkers and commitment strength scores to all clients. In the second analysis, outcomes were regressed on the a group commitment measure composed of nine items measuring affective, normative, and continuance commitment (Meyer, Allen, & Smith, 1993) to coworkers as a group and clients as a group, not to individual beneficiaries. Conceptually, the averaged commitment strength scores differ from measurements of commitment to groups as they are based on an aggregation of commitment ratings provided for individuals rather than as a single rating about commitment to a reference group. Moreover, these commitment ratings specifically

asked about the extent to which participants are committed and dedicated to beneficiaries based on Klein et al.'s (2012) definition of commitment. Coefficient alpha for group commitment to coworkers was $\alpha = .79$, and group commitment to clients was $\alpha = .81$.

Logistic and hierarchical regression analyses were conducted to assess the effects of commitment strength to coworkers on retention and intentions to remain as well as the effects of commitment strength to clients on job performance and prosocial behavior. Results from these analyses showed that commitment strength to coworkers had a significantly positive relationship with retention ($B = .91$, Wald $\chi^2 = 6.57$, $p < .05$; Table 9, DV: Retention, Model 2) but did not significantly predict intentions to remain ($\beta = .04$, $t = .27$, *n.s.*; Table 9, DV: Intentions to Remain, Model 2). Similarly, commitment strength to clients positively and significantly predicted job performance ($\beta = .37$, $t = 2.60$, $p < .05$; Table 10, DV: Job Performance, Model 2), but it did not significantly predict prosocial behaviors ($\beta = .18$, $t = 1.17$, *n.s.*; Table 10, DV: Prosocial Behaviors, Model 2).

Additionally, polynomial regression analyses and surface response methodology using commitment strength to coworkers and commitment strength to clients as predictors were conducted (see Table 11 and Table 12). As shown in Model 2 of Table 11, the three second-order polynomial terms ($b_3 = \text{commitment strength to coworkers}^2$, $b_4 = \text{commitment strength to coworkers} \times \text{commitment strength to clients}$, and $b_5 = \text{commitment strength to clients}^2$) were jointly significant in predicting retention ($\chi^2 \text{ difference} = 15.54$, $df = 3$) but not jointly significant in predicting intentions to remain ($F = 1.53$, *n.s.*). The slope along the congruence line ($I = E$) was positive and significant for retention (slope [$b_1 + b_2$] = 3.94, $p < .05$; see Figure 8) but negative and not significant for intentions to remain (slope [$b_1 + b_2$] = -.03, *n.s.*; see Figure 9).

With regards to predicting job performance and prosocial behaviors, the three second-order polynomial terms were not jointly significant in predicting job performance ($F = 1.12, n.s.$) or prosocial behaviors ($F = .78, n.s.$). Model 2 of Table 12 reports that the congruence line slope was negative and significant for job performance (slope $[b_1 + b_2] = -.25, p < .05$; see Figure 10) and positive and marginally significant for prosocial behaviors (slope $[b_1 + b_2] = .26, p = .07$; see Figure 11). These results indicate that retention was more likely and intentions to remain and job performance were higher at high levels of congruence between commitment strength to coworkers and commitment strength to clients compared at low levels of congruence.

Table 11 and Table 12 also report results from examining the slope along the incongruence line ($I = -E$). Table 11 reports that for retention, the slope along the incongruence line was positive and significant (slope $[b_1 - b_2] = 6.55, p < .05$). For intentions to remain, the incongruence line slope was positive but not significant (slope $[b_1 - b_2] = .23, n.s.$). Results reported in Table 12 show that the incongruence line slope was negative and not significant for job performance (slope $[b_1 - b_2] = -.25, p = .07$) but negative and not significant for prosocial behaviors (slope $[b_1 - b_2] = -.02, n.s.$). These results suggest that a marginal incongruence effect was found for the distribution of commitment bond strength to coworkers versus clients on job performance but not on retention, intentions to remain, and prosocial behaviors.

In addition to assessing the effects of commitment strength to coworkers and clients as predictors of outcomes, logistic and hierarchical regression analyses were conducted to assess the effects of commitment to coworkers and commitment to clients. Results (see Table 13, Model 2) showed that group commitment to coworkers did not significantly predict retention ($B = .43, \text{Wald } \chi^2 = .87, n.s.$) or intentions to remain ($\beta = .14, t = .92, n.s.$). Similarly, neither job performance ($\beta = -.08, t = -.51, n.s.$; Table 14, DV: Job Performance, Model 2) nor prosocial

behaviors ($\beta = -.24$, $t = -1.53$, $n.s.$; Table 14, DV: Prosocial Behaviors, Model 2) were significantly predicted by group commitment to clients.

Polynomial regression was also conducted using group commitment as predictors of outcomes, and resulting coefficients were used to test the slopes of the congruence line ($I = E$) and incongruence line ($I = -E$) for response surface analysis. Results are reported in Table 15 and Table 16, and they indicate that the three second-order polynomial terms ($b_3 = \text{commitment to coworker group}^2$, $b_4 = \text{commitment to coworker group} \times \text{commitment to client group}$, and $b_5 = \text{commitment to client group}^2$) were not jointly significant in predicting retention (χ^2 difference = .29, $df = 3$), intentions to remain ($F = 1.11$, $n.s.$), job performance ($F = .23$, $n.s.$), or prosocial behaviors ($F = .78$, $n.s.$). Assessment of the slope along the congruence line $I = E$ showed that it was positive but not significant for retention (slope $[b_1 + b_2] = .52$, $n.s.$; see Figure 12), intentions to remain (slope $[b_1 + b_2] = .54$, $n.s.$; see Figure 13), job performance (slope $[b_1 + b_2] = .08$, $n.s.$; see Figure 14), and prosocial behaviors (slope $[b_1 + b_2] = .01$, $n.s.$; see Figure 15).

Results for the slope along the incongruence line $I = -E$ can also be found in Table 15 and Table 16. The slope was found to be positive and not significant for retention (slope $[b_1 - b_2] = .06$, $n.s.$) and intentions to remain (slope $[b_1 - b_2] = .10$, $n.s.$). For job performance, the slope was found to be positive and not significant (slope $[b_1 - b_2] = .27$, $n.s.$), but the slope was positive and significant for prosocial behaviors (slope $[b_1 - b_2] = .75$, $p < .05$). In sum, these results suggest that neither a congruence effect nor an incongruence effect were found for the distribution of group commitment to coworkers and clients on retention, intentions to remain, job performance, or prosocial behaviors.

Commitment to clients as moderator. As Klein et al., (2012) argued, it is possible for commitment to different targets to either conflict with one another or be synergistic. Indeed, in

his conceptual model, he identifies commitment to other targets as a potential moderator affecting the processes that lead a person to make decisions about to whom he or she is committed. Given that two different targets are identified in the hypothesized model, the push-or-pull dynamic described by Klein et al. (2012) was assessed with a new model integrating the two commitment targets. Specifically, employees' commitment bonds to specific clients were aggregated to the individual level and was introduced as a cross-level moderator of relationships between contact with coworkers and commitment to coworkers. Commitment to clients was the appropriate choice for aggregation to the individual level because, while there was considerable within-individual variance in commitment to coworkers (49.7%), variance in commitment to clients was largely between individuals. This suggests that although employees may have differed from one another in their decisions to commit to clients, each employee's own decisions about commitment to their clients remained consistent. Therefore, very little within-individual variation in commitment to clients (5.8%) was lost by aggregating to the individual level.

Two sets of HLM slopes-as-outcomes models were analyzed to assess for the cross-level interaction, one for each measure of commitment to clients – a count of the number of commitment bonds to clients and average strength of commitment bonds to clients. All Level-1 variables were group-mean centered while Level-2 variables were grand-mean centered. Results of the two sets of analyses showed differing effects. Specifically, when using the count of commitment bonds to clients, results showed that commitment to clients did not moderate the relationship between contact frequency ($B = .001, t = .24, n.s.$), contact duration ($B = -.00, t = -1.19, n.s.$), and contact depth ($B = -.001, t = -.38, n.s.$) and commitment bond formation to coworkers (see Table 20).

However, results from analyses conducted using the measure of average strength of commitment bonds to clients (see Table 21) showed that while commitment to clients did not moderate the relationship between contact frequency and commitment bond formation to coworkers ($B = .03, t = .60, n.s.$), it significantly and negatively moderated the relationships between contact duration and commitment bond formation to coworkers ($B = -.001, t = -2.08, p < .05$; see Figure 16) and the relationship between contact depth and commitment bond formation to coworkers ($B = -.12, t = -3.38, p < .01$; see Figure 17). Additionally, a main effect for commitment strength to clients ($B = .39, t = 3.85, p < .01$) was detected, and the inclusion of the cross-level interaction terms explained an additional 5% of variance in commitment bond formation to coworkers. Simple slope analyses (Aiken & West, 1991) showed that contact duration was positively related to commitment bond formation to coworkers when commitment to clients was low ($B = .002, t = 2.94, p < .01$) but unrelated to commitment bond formation to coworkers when commitment to clients was high ($B = .00, t = .04, n.s.$). Simple slopes analyses also revealed that the slope between contact depth and commitment bond formation to coworkers was more positive when commitment to clients was low ($B = .51, t = 8.41, p < .01$) than when commitment to clients was high ($B = .17, t = 2.78, p < .01$).

DISCUSSION

The purpose of this dissertation was to examine the process by which employees may commit to individuals impacted by their jobs (beneficiaries) and how these individual commitments influence organizational outcomes of interest. By integrating three streams of research – job embeddedness, relational job design, and target-free commitment – a model was developed and tested to answer the following research questions: How do direct interactions with beneficiaries influence employees' commitment bond formation, and once commitment bonds have formed, does the distribution of these psychological bonds among two groupings of beneficiaries differentially impact employees' turnover decisions and behaviors exhibited on the job? The goal was to shed light on the value of considering employees' social networks in the workplace for specific relationships that would promote employee retention and performance. The results of analyses conducted offer some interesting answers to these questions and hold some implications for how we may view the process by which commitment is formed and, in turn, generates outcomes of interest.

Hypothesized Relationships

Overall, surprisingly little support for the hypothesized relationships between contact with beneficiaries and commitment bond formation was found. Specifically, as a whole, there was marginal support for the effects of contact frequency contact duration on commitment bond formation to beneficiaries while contact depth was found to positively predict commitment bond formation to beneficiaries. However, these effects were isolated to commitment bonds that employees formed to their coworkers. These findings hold some interesting discussion points about not only the dimensions of contact but also differences between coworkers and clients.

First, the marginal support for the effects of contact frequency and contact duration on the development of commitment to beneficiaries – regardless of whether they are coworkers or clients – compared to the support found for the effects of contact depth on commitment bond highlights that quantity (i.e., amount of contact and time), though arguably important, is not everything. Indeed, results found in this study suggest that the personal nature of interactions may be particularly important for employees' decisions to commit to their beneficiaries. The effect size for depth of contact with a coworker (.36) is considered to be a small-to-medium effect size (Cohen, 1988), and it suggests that for each unit increase in how personal the nature of contact is with a coworker, an employee's commitment strength increases by 36%. Moreover, one standard deviation above the mean in depth of contact ($SD = 1.64$) results in an additional 59% increase in commitment to a coworker. However, with an unstandardized coefficient of .11, frequency of contact ($SD = 1.25$) yields less of an increase in commitment strength to a coworker; at one standard deviation above the mean in frequency of contact, there is only a 13.8% increase in commitment to a coworker. Duration of contact has an effect size of .0008, yet with a standard deviation of 169.01 minutes, it also increases commitment strength to a coworker by 13.5% at one standard deviation above the mean.

While the 13% increase in commitment bond strength offered by contact frequency and also by contact duration are still valuable, even together, they yield less than the increase in commitment bond strength offered by increases contact depth alone. Practically speaking, these comparisons suggest that even the slightest increase in the extent to which employees share aspects of their personal identity and lives with beneficiaries results in over four times the commitment that would be seen by increasing frequency of contact by one additional time per week or increasing the time spent with a beneficiary by one minute. This finding aligns with

Grant's (2007) argument that interactions with beneficiaries involving the sharing of feelings and aspects of oneself that taps into one's sense of identity is more likely to make such interactions more memorable. Moreover, because commitment is a psychological bond, there needs to be a level of consideration and care for a beneficiary before one commits to him or her. As a form of social exchange, sharing one's feelings and identity contributes to such a psychological bond (Klein et al., 2012). Thus, while quantity of time increases the *opportunity* to develop deep connections and therefore high levels of care and concern for beneficiaries, they do not guarantee that such connections will form.

Second, the way commitment to coworkers is developed and the way commitment to clients is developed seems to be different. Indeed, Klein et al. (2012) highlighted that conceptualizing commitment as a target-free psychological bond would enhance our ability to better understand how commitment might differ given different targets, and the comparison between coworkers and clients in this study demonstrate that there are differences in *how* those commitment bonds are formed as well. While there was marginal support for the impact of contact quantity (frequency and duration) and support for contact depth on commitment to coworkers, a different pattern of results was found for commitment to clients. Specifically, no relationship between contact depth and commitment to clients was found, and only the relationship between contact frequency and commitment bond formation to clients was marginally supported. This implies that the effects of sharing one's personal identity and life with another on one's decision to commit to him or her does not generalize across targets.

However, it is possible that these differences are due to the different analyses utilized to test the relationships. Because there was a lack of within-individual variance in participants' commitment to clients, hierarchical linear modeling was not used to assess the relationships

between contact dimensions and commitment to clients. Consequently, the larger sample for the analysis was lost, and the analyses conducted to test these relationships were done so with substantially less power than the analyses conducted to test the relationships between contact and commitment to coworkers. Indeed, post-hoc power analysis results showed that the power to detect effects for contact and commitment bonds to coworkers ranged from .06 (duration x quality of contact interaction) to .92 (frequency of contact and depth of contact), but power to detect effects found for contact and commitment bonds to clients were as low as .01 (depth x quality of contact and duration x quality of contact) and only as high as .67 (frequency x quality of contact). Consequently, there is a strong likelihood that the lack of support for relationships pertaining to commitment bonds to clients is due to power deficiencies.

Third, although no support was found for the hypothesized moderating effect of contact evaluation on the relationships between contact dimensions and commitment bond formation to clients, contact evaluation was found to significantly and negatively moderate the relationship between contact frequency and commitment bond formation to coworkers. Results from simple slopes tests suggest that only the slope for low evaluation of contact was marginally significant, and results from HLM analyses showed that, while the main effect for contact frequency was marginally significant, evaluation of contact had a positive effect on commitment bond formation to coworkers. This suggests that the effect is being driven by evaluation of contact, and because the main effects of contact frequency and evaluation of contact have already been partialled out when testing for a moderating effect, there is little variance in commitment bond formation coworkers left to explain. Figure 3 also visually shows that when evaluation of contact is low, greater frequency of contact yields greater commitment to coworkers versus less frequent contact.

While this seems counterintuitive, contact hypothesis theory (Allport, 1954) may provide an explanation. Allport (1954) posits that when individuals belonging to different groups have direct contact with one another, they are more likely to experience a reduction of prejudices they may have towards one another if the individuals a) hold equal status in the situation, b) share common goals, c) experience intergroup cooperation, and d) have the support or approval of authorities, laws, or customs. This is because these conditions facilitate a social setting in which individuals might have more meaningful and information-rich exchanges that might pave the way for changes in attitudes or behaviors (Allport, 1954; Yehuda, 1969). Individuals may glean more information and knowledge about others through their contact with them (Allport, 1954). Indeed, prejudice may be reduced by contact due to perspective taking, empathy, and other affective processes (Pettigrew & Tropp, 2008).

All four of these conditions are met in the sample here; all participants and their coworkers hold the same rank and position within their organization, they share the common goal of providing high-quality care for their clients, functional interdependence is required to achieve their goal, and supervisors strongly encourage interaction, communication, and collaboration among employees. As such, one reason for why greater frequency of contact results in greater commitment to coworkers when evaluation of contact is also low is because, despite having a negative assessment about the interaction itself, the more frequent contact gives an employee more information about the coworker – information that might shed light into the situation and help the employee better understand. With this, the employee may find himself or herself deciding to commit to the coworker despite the negative interactions because the additional information offers a different perspective or a better understanding of the individual, one that may help the employee look past the negative experience. When contact is less frequent,

however, the opportunity to gather this information is reduced, thereby yielding no change in the employee's decisions about committing to the coworker.

Third, the lack of support for the effects of total number of commitment bonds employees form, either to their coworkers or to their clients, on outcomes of interest – particularly retention and intentions to remain – presents a challenge to the arguments about the predictive value of the links dimension of job embeddedness, which focuses on the number of connections an employee has to his or her organization rather than the quality of those ties (Mitchell et al., 2001). While Mitchell and colleagues (2001) argue that having more ties to the organization, through the on-the-job relationships employees form, would make it harder for them to leave the organization, the results reported here do not support this argument. In fact, the number of commitment bonds employees form seem to have no bearing on whether employees remain, harbor intentions to remain, perform well, or engage in prosocial behaviors. In other words, the number of people to whom employees are committed was found to neither corroborate prior research's conclusions about the effects of organizational commitment (e.g., Solinger et al, 2008; Somers, 1995) nor to those about occupational commitment (e.g., Lee et al., 2000; Becker et al., 1996; Somers & Birnbaum, 1998).

With regards to the lack of support for the congruence and incongruence effects, it should be noted that, on average, participants came into contact with three times as many clients ($M = 31.71$) than coworkers ($M = 9.57$). The large difference is likely due to the organizational context in which participants worked. While each organization branch would serve between 27-67 clients, it would employ only 10-23 employees. Additionally, employees were scheduled to work in shifts throughout the week with only two or three other coworkers. Moreover, there was rarely a change in either work shift or those who worked them. In several cases, the work shift schedule

would be such that some employees never came into contact another employee during their shift. However, during each work shift, all employees would have the opportunity to have contact with every client. Because commitment bonds for these analyses testing congruence and incongruence were operationalized as a count of the number of bonds participants have towards coworkers versus clients, the cap to how many coworkers to whom they could be committed is much lower than that for clients.

Exploratory Analyses

The exploration of how relationships between commitment and outcomes might change based on the operationalization of commitment yielded some interesting findings. To recap, two different measures of commitment were used to conduct these analyses: commitment strength to the two groupings of beneficiaries and commitment to the group. These two measures differed in the *target* of contact. With the former, participants were asked to reference an *individual* beneficiary when responding to questions about commitment strength whereas with the latter, the beneficiary *group* was the target specifically referenced. A further comparison of the different measures can be found in Table 17.

Table 18 presents a comparison of results obtained from analyses conducted with the different measures of commitment. As reported earlier and in Table 18, when measured as a count of commitment bonds, commitment to coworkers and clients did not predict retention, intention to remain, job performance, or prosocial behaviors. In other words, being committed to more coworkers or more clients did not result in greater likelihood to remain on the job or in high intentions to remain, job performance, or prosocial behaviors. The same effects, or lack thereof, were found for commitment to the coworkers group and commitment to the client group.

However, analyses utilizing commitment bond strength, aggregated from the individual to the group level, produced different results. Specifically, commitment strength to coworkers was positively related to retention, and commitment strength to clients was positively related to job performance. These results align with previous findings on the outcomes of organizational commitment and occupational commitment (e.g., Solinger et al, 2008; Somers, 1995; Becker et al., 1996; Somers & Birnbaum, 1998), and they hold insight for our understanding of functional and dysfunctional turnover (Dalton et al., 1981) and turnover functionality (Hollenbeck & Williams, 1986). Specifically, for organizations to avoid dysfunctional turnover – the loss of employees who provide performance value to the organization – it seems employees need to be strongly committed to *both* their coworkers *and* their clients. To be clear, the difference in results of these analyses and those conducted regressing retention and job performance on the *number* of commitment bonds indicates that simply being committed to individuals is not sufficient to retain employees and produce high performance. Rather, being mildly committed to individuals versus strongly committed to individuals yields different outcomes.

Moreover, polynomial regression and surface response analysis results from regressing retention and intentions to remain on the strength of commitment bonds to coworkers and clients found congruence effects. In other words, the stronger employees' commitment to coworkers *and* clients, the more likely they were to be retained by the organization and harbor intentions to remain. Again, these effects were found only when commitment was operationalized as commitment strength, further lending credit to the consideration of just how strongly employees are committed to specific individuals. However, even more interesting is that the congruence effect was only found for the outcomes related to turnover and not the outcomes related to behavior at work. It would seem that congruence in commitment strength to coworkers and

clients saves the organization from losing their employees, but it does not necessarily result in more observance of desired behaviors from the retained employees. In fact, the opposite effect was found for job performance; the greater the congruence and the more committed employees were to coworkers and clients, the lower their performance was evaluated to be. With regards to relative strength, an incongruence effect was found only for retention; employees were more likely to remain with the organization when their commitment to coworkers was stronger than their commitment to clients.

It should be noted that these relationships were only found when specific *individual* beneficiaries are referenced as targets of commitment. When the beneficiary *group* was referenced, no relationship was found between commitment to the group and retention or performance (see Table 18). Additionally, no congruence effects were found for commitment to the coworker group and commitment to the client group on retention, intentions to remain, job performance, or prosocial behaviors (see Table 19). However, there was an incongruence effect on prosocial behaviors. This indicates that, contrary to what was hypothesized, participants engaged in the most prosocial behaviors when there was a disproportionate amount of commitment towards the coworker group versus the client group. One possible explanation for this is that employees may perceive going the extra mile to take care of their clients contributes to the organization's overall well-being – specifically its reputation as an organization in the industry and client satisfaction (Mowday et al., 1982), which directly impacts their coworkers' job security. Another possible reason might be due to their social identity as a member of the organization's employee group. Because employees' job directly pertain to the care of their clients, employees who are committed to their coworker group and desire to maintain membership in the group and ensure membership security might engage in prosocial behaviors to

communicate their willingness to put in the additional effort as a member of the group (Mowday et al., 1982).

The importance of selecting the appropriate measures is further highlighted by the differences in results from the slopes-as-outcomes model analyses that were conducted to test a cross-level moderation effect for commitment to clients. Indeed, when a count variable was used as a measure of commitment to clients, no cross-level moderation was detected. However, conducting the analyses with a commitment strength measure for commitment to clients yielded very different results. Specifically, commitment strength to clients was found to negatively moderate both the relationship between contact duration and commitment to coworkers and the relationship between contact depth and commitment to coworkers. In other words, the more committed employees were to their clients, the weaker the positive relationship between contact duration and commitment to coworkers and contact depth and commitment to coworkers.

Figure 16 and Figure 17 both suggest that the slope for high commitment strength to clients was less positive than the slope for low commitment strength to clients. Indeed, for the relationship between contact duration and commitment to coworkers, the line for high commitment strength to clients was flat and nonsignificant whereas the line for low commitment strength to clients is steeper and significant. Similarly, for the relationship between contact depth and commitment to coworkers, the line for low commitment strength to clients is visibly steeper than that for high commitment strength to clients, even though both are significant.

In addition to highlighting the importance of carefully selecting measures, these results also confirm some of Klein et al.'s (2012) arguments regarding how commitment to different targets affect one another and may serve as moderators. Commitments that compete with one another can impede the development of additional commitment bonds, but if commitments

complement one another, they may facilitate new commitment bond formation (Klein et al., 2012). In addition to its moderating effect, commitment strength to clients was found to have a significant positive main effect as well. While the attenuating effect found for commitment strength as a moderator of processes connected to developing commitment bonds seems to embody the argument that our resources, such as time and attention, are limited (Kanfer & Ackerman, 1989), its positive main effect on commitment bond formation to coworkers suggests that there could be some synergy between commitment to the two targets in that they are positively related to one another.

Sample Size

Given the small sample on which much of the analyses for this dissertation were conducted, a discussion is warranted on why the sample size is lacking. Through the iterations of data collection, several challenges to obtaining a sample became apparent. First, the nature of the participants' jobs made it impossible for them to complete a survey during their work hours. The original design for data collection was for all data to be collected in person and initial contact was made in person. While following through with this design, it quickly became apparent that participants would not be able to complete surveys during work hours. Each location served between 27 to 66 clients, but staffing decisions were dictated by the time of day rather than number of clients. As such, one to four employees were scheduled to a shift, and during each shift, tasks required of employees included everything from assisting clients into common areas for meals or activities to distributing medication to addressing both work-related and non-work-related inquiries from clients and clients' families to answering phone calls. I spent up to three hours at a site only to have four participants complete a five-minute pre-survey because they simply did not have the time to pause in their work responsibilities. Moreover, even when time

was available, a number of employees expressed distrust in the study and declined the invitation to participate.

Consequently, initial contact was made with 100 employees, but the decision to virtually administer the main survey was made to minimize strain on participants' time at work. However, the initial launch of the data collection effort resulted in only eight participants, and even fewer completed the surveys. Survey records showed participants would spend between 25-40 minutes on the survey, and many stopped answering questions within 20 minutes. After reviewing the data collection procedures, I determined that compensation needed to be provided for my participants' time and secured funding to pay each participant \$40 for completing his or her survey. Participants were recruited virtually through email and through their organization branch in which flyers were distributed among the employees. Thirty-five participants completed the survey in the week given to participate. The deadline to complete the survey was extended by another week with the hope that additional participants would participate, and another 17 completed the survey after another wave of recruiting emails and flyers were distributed. Among the 52 participants, complete data was obtained for only 50 participants.

A second data collection effort was undertaken to increase the sample size six months later, but it seemed the majority of interested participants had already participated in the study; this second effort yielded an additional 23 participants. However, supervisor ratings on job performance and prosocial behaviors were not provided for three participants, and two participants did not complete the survey. As a result, the sample size increased by 18 participants, bringing the total sample size to $n = 68$. Although this sample size is not ideal and poses considerable limitations, the effort to recruit participants, adjust procedures to reduce participant fatigue, and collect data was rigorously executed.

Implications

The results of this dissertation have several implications for both theory and practice. First, inconsistent evidence supporting the first half of the model, which focused on the nature of employees' contact with and their decisions to commit to beneficiaries, challenges existing arguments related to relational job design. Existing theory has argued that interacting with and having contact with those who directly benefit from one's job would result in one's development of affective commitment to such beneficiaries (Grant, 2007). Specifically, these direct interactions are believed to result in emotional concern for the beneficiaries being served on the job and a desire to improve their welfare. The results of this study do not consistently support this assertion. While some support was found for these relationships as they are directed towards coworkers, very little support was found for the same relationships with reference to clients.

This is particularly interesting given that all participants were employed in a care-giving role, specifically as a personal care assistant or in the kitchen at an assisted living facility. Intuitively, the nature of participants' jobs should naturally incline them towards caring for others, especially the beneficiaries (i.e. clients) who they directly serve in their job. One possible reason for why this relationship was not found is because the nature of the job and the typical events that may take place in this particular work environment might be a deterrent of commitment to clients. Unlike patients in a hospital or a clinic, the clients of the assisted living facilities from which participants were recruited do not improve in health and return to the comfort of their family home. Though not the same as a nursing home, clients of assisted living facilities are nearing end of life and showing signs of needing others to help in normal day to day activities. With each interaction, employees may become overwhelmingly aware of their clients' condition and desire to distance themselves from the inevitable – death or departure from their

facility to a nursing home. Thus, similar to nurses, these employees are vicariously exposed to death and decline of human life (Ashforth & Kreiner, 1999). These negative events can be particularly difficult to cope with when one feels dedicated and committed to the individual's well-being; nothing the employee can do can prevent these events from taking place. Therefore, as a means of preventing the psychological trauma of losing someone to whom one was committed, employees may decide to not commit to their clients in the manner described by Klein et al. (2012) and operationalized by measures in this study.

Moreover, exploratory analyses indicated that commitment to other individuals can moderate the processes by which contact with beneficiaries results in commitment to them. The notion of relationships with others moderating the process by which contact with beneficiaries produces commitment to them are ignored in Grant's (2007) model. Given that resources are required to maintain these relationships, or commitment bonds, the need to more closely examine how existing commitments hurt or help these processes is important. Though not formally hypothesized in this dissertation, the discovery of these relationships was the product of integrating the relational job design with Klein et al.'s (2012) conceptualization of commitment as a target-neutral psychological bond.

Secondly, the findings of this study contradicts long-standing research that has connected commitment to withdrawal behaviors and turnover (Solinger et al., 2008; Somers, 1995) and on-the-job behaviors (Becker et al., 1996; Somers & Birnbaum, 1998). Prior research focused heavily on organizational commitment and occupational commitment as predictors of turnover and performance. However, the targets of commitment in this study were coworkers and clients, and though they serve as proxies for the organization and the occupation respectively, commitment to individual coworkers and individual clients did not yield the same results as prior

research indicated might be possible. These results suggest there is still likely to be a clear distinction between the different targets despite the targets' affiliation with a larger collective.

This distinction is even more compelling when considering the lack of support for the effects of commitment to the group on retention, intentions to remain, job performance, and prosocial behaviors. As Klein and colleagues (2012) pointed out, one of the assumptions underlying most commitment research is that "commitment to the employing organization is generalizable to all other workplace targets" (p. 130). The comparison of findings garnered from three different operationalizations of commitment provided supporting evidence for why such an assumption results in misinformation. While support for some of the relationships between commitment and outcomes were found when specific individuals were referenced as targets of commitment, these relationships were not detected when groups were referenced. Considering that the individual targets are the very same individuals that compose the groups of beneficiaries (coworkers or clients), it appears that the effects are driven by an employee's commitment to a subset of group members rather than commitment to the group as a whole. Therefore, there seems to be merit in measuring commitment to specific individuals and recognizing that aggregating those commitments to the group level is not equivalent to assessing commitment to the group as a whole.

Alternatively, one could make the argument that the difference in effects is due to the operationalization of commitment, either as a volitional and discretionary psychological bond or as an attitude comprised of emotion, duty, and a lack of alternatives as it has been historically viewed. Under this perspective, commitment would yield the desired outcomes only when employees consciously decide to dedicate themselves to their beneficiaries. This offers one potential explanation for why commitment was not found to be significantly related to outcomes

as in prior research is because the commitment as a psychological bond is theoretically different from traditional definitions of commitment. The results of this study support the argument that commitment as a psychological bond made through an individual's conscious decision to be dedicated to and responsible for a given target is distinctive from more traditional conceptualizations of commitment. Together, these implications help to possibly shift consensus in the commitment literature by echoing Klein and colleague's (2012) argument that commitment has been confounded with other attitudes and psychological states.

Practically, this study holds implications for managers who hope to increase employees' feelings of responsibility and dedication to their coworkers and clients. Rather than organizing employees in such a manner to heighten quantitative elements (e.g., time) of employees' interactions with one another and clients, managers may want to focus more on facilitating interactions that encourage making a personal connection. Additionally, managers should be aware that when it comes to distributing psychological resources, employees seem more apt to commit them to their coworkers rather than clients. By recognizing that employees are likely to choose to behave in a manner that reflects dedication to their coworkers over their clients, managers may be able to implement strategies that encourage employees to direct resources towards the organization's clients, particularly in organizations specializing in customer care.

Limitations and Future Directions

Despite the insight to the development of commitment bonds and their relationships to organizational outcomes obtained from this study, there are still a number of serious limitations to consider. First, though every effort was made to increase the sample size for this study, ultimately the analyses conducted to assess the relationships between commitment and retention, intentions to remain, job performance, and prosocial behaviors utilized a small sample, resulting

in low statistical power. This is particularly true given the small effect sizes for some of the predictors. With a sample size of 68 participants, G*Power analysis results showed that power for models predicting retention, intentions to remain, job performance, and prosocial behaviors was no higher than .69. Consequently, there is a possibility that Type II Error is observed in this study, which may explain the lack of significant results in this study. Still, given the social network approach to assessing commitment and the interesting findings related to measurement of commitment, future research may build on the design of this study to further explicate how commitment decisions are made and their implications for retention and performance.

A second limitation is with the sample itself. All data was collected from a very gender-homogenous sample; of the 68 participants, only three were men. Moreover, all participants were employed in the same job title. While there was a large range in tenure with the organization ($M = 2.20$ years, $SD 2.83$), participants were often limited in the number of coworkers with whom they would interact due to the nature in which they were employed. Rather than occupying a regular 9am-to-5pm work schedule, participants worked in shifts throughout the week, often with the same coworkers. As a result, a restriction of range was inadvertently introduced to variables related to contact with and commitment to coworker.

Additionally, it appears that much of the overall contact participants had with beneficiaries was dominated by their contact with their clients. While the contact frequency ($r = .77$), contact depth ($r = .74$), and evaluation of contact ($r = .72$) to coworkers shared high correlations with their respective overall contact dimensions, as shown by the unusually high correlations between contact frequency ($r = .95$), contact depth ($r = .98$), and evaluation of contact ($r = .96$) with their respective overall contact dimensions. A good comparison that illustrates this further is with contact duration; contact duration to coworkers was correlated with

overall contact duration at $r = .32$ while contact duration to clients' was correlated with overall contact duration $r = .98$. Furthermore, despite varying contact frequency ($SD = 1.33$), duration of contact ($SD = 184.68$), and depth of contact ($SD = 1.77$), there was very little within-individual variance in commitment to clients. This suggests that despite the differences in how participants came into contact with each client relative to others, they committed to individual clients equally. Considering participants reported being committed to an average of 30.13 clients ($SD = 15.25$) but as many as 62 clients, it is possible that employees do not differentiate their commitment to clients to cope with the sheer volume of clients to whom they are committed.

Lastly, although the social network approach to collect data allowed individual relationships to be assessed, there are two disadvantages for using this approach that were observed in this study. First, by utilizing social network methodology, a trade-off had to be made to avoid overburdening participants with a lengthy questionnaire, which still resulted in a rather time-consuming survey. Specifically, rather than utilizing multiple items to assess constructs, participants responded to single-item measures assessing contact frequency, contact duration, contact depth, and contact duration. There is the possibility that participants misunderstood questions, particularly with respect to contact duration, as suggested by its unusually large average and standard deviations for the measure. Moreover, single-item measure prohibited the validation of the scales used for each construct. This is especially important because the items used to assess contact frequency, contact duration, contact depth, and evaluation of contact are not measure that have been validated. Secondly, the use of a roster as opposed to free recall (Wasserman & Faust, 1994) significantly lengthened the surveys, which likely contributed to the lack of participants completing the survey. Indeed, participants spent, on average, about 30 minutes completing the survey, and a number of potential participants failed to complete their

surveys. Still, the roster method was necessary for this dissertation as the focus was on distinguishing the impact of commitment to individual coworkers from commitment to individual clients, and it more accurately tested Klein et al.'s (2012) new approach to conceptualizing and measuring commitment.

Despite these limitations and the lack of significant findings, this dissertation is the first to attempt to integrate three streams of research that have each aimed to explain turnover yet fall short. In fact, pioneering studies of this nature have often been conducted using small, homogenous samples. For example, the early testing of the Unfolding Model of Turnover (Lee & Mitchell, 1994) was conducted on small samples of nearly all-female nurses (e.g. Lee et al., 1996). Moving forward, future research on how individual relationships are formed and in turn impact turnover decisions and on-the-job behaviors should aim to draw participants and samples from outside a single industry that may have unforeseen impact on the proposed relationships. It would be interesting, for example, to see if the different types of employees' jobs (e.g., caregiver, service provider, educator) influence the nature of contact with beneficiaries or potentially serve as a moderator to the relationships between contact and outcomes.

Additionally, future research may want to explore different types of psychological bonds with beneficiaries and other beneficiary groups. For example, the distinction between commitment and identification as proposed by Klein and colleagues (2012) suggest there is a need to explore how psychological bonds change and differentially impact organizational outcomes. This research might be particularly insightful for the healthcare or assisted living industry as those working in these industries are more likely to witness and experience decline of health. Understanding how different psychological bonds exacerbate the consequences of

experiencing such negative events at work and the importance of emotion regulation may offer a different theoretical framework for understanding how commitment may or may not develop.

Conclusion

This dissertation developed and tested an integrated framework for explaining how psychological bonds of commitment develop and impact outcomes that determine whether turnover is functional or dysfunctional. By integrating relational job design (Grant, 2007), job embeddedness (Mitchell et al., 2001), and a framework for target-free commitment (Klein et al., 2012), the model presented here explores how interactions with individuals may translate into decisions to remain with the organization and exhibit favorable behaviors while on the job. As organizations are constantly battling the costs of turnover while simultaneously seeking out ways to motivate employees to perform better, the hope is for this dissertation to provide new information on how traditional theories of organizational commitment might apply differently to commitment to individuals within and served by the organization.

APPENDICES

Appendix A—Survey Format

Question		How often do you have contact with this individual?	On average, how long (in minutes) are your interactions with this individual?	On average, to what extent were your interactions with this individual personal, and not just work related?	On average, how would you evaluate the quality of your interactions with this individual?
Response Scale	Mark with an "X" the individuals listed here with whom you have had direct contact with in the last two weeks.	<i>1 = 1 time a week 2 = 2 times a week 3 = 3 times a week 4 = 4 times a week 5 = 5 times a week 6 = 6 times a week 7 = every day</i>	<i>please write in your answer</i>	<i>1 = not at all 2 = to a very small extent 3 = to a small extent 4 = to some extent 5 = to a moderate extent 6 = to a large extent 7 = to a very large extent</i>	<i>-3 = very negative -2 = negative -1 = somewhat negative 0 = neutral 1 = somewhat positive 2 = positive 3 = very positive</i>
Supervisors					
Supervisor A					
Coworkers					
Coworker A					
Coworker B					
Coworker C					
Clients/Customers					
Client A					
Client B					
Client C					

Question	I voluntarily made the decision to commit to this individual.	I voluntarily made the decision to be dedicated to this individual.	To what extent are you committed to this individual?	To what extent are you dedicated to this individual?	Below you will see a list of individuals to whom you have indicated that you are committed. Please distribute 100 commitment points among these individuals to reflect how committed you are to each individual. These 100 points can be allocated evenly or unevenly across individuals, but a minimum of 1 point must be distributed to each individual. <u>You must assign all 100 points.</u>
Response Scale	0 = no 1 = yes	0 = no 1 = yes	1 = not at all 2 = slightly 3 = somewhat 4 = moderately 5 = mostly 6 = very 7 = completely	1 = not at all 2 = slightly 3 = somewhat 4 = moderately 5 = mostly 6 = very 7 = completely	
Supervisors					
Supervisor A					
Coworkers					
Coworker A					
Coworker B					
Coworker C					
Clients/Customers					
Client A					
Client B					
Client C					

Appendix B—Figures and Tables

TABLE 1: Within-Individuals Means, Standard Deviations, and Correlations

	Variable	M	Sd.	1	2	3	4	5
1	Contact Frequency to Coworkers	2.57	1.25					
2	Contact Duration to Coworkers	89.02	169.01	.18**				
3	Contact Depth to Coworkers	2.74	1.64	.27**	.30**			
4	Evaluation of Contact to Coworkers	1.50	1.35	.15**	.14**	.14**		
5	Commitment to Coworkers (dichotomous)	1.84	0.37	.13**	.02	.11**	.46**	
6	Commitment to Coworkers (strength)	5.14	1.81	.11*	.10*	.14**	.50**	.56**

Note. n = 519. All missing data was listwise deleted. Dichotomous commitment items are coded 2 = yes, 1 = no.

** $p < .01$

* $p < .05$

TABLE 2: Between-Individuals Means, Standard Deviations, and Correlations

	Variable	M	Sd.	1	2	3	4	5	6	7	8
1	Tenure	2.20	2.83	--							
2	Frequency of Contact with Clients	3.35	1.01	.00	--						
3	Duration of Contact with Clients	56.68	182.94	.00	-.07	--					
4	Depth of Contact with Clients	2.31	1.45	.17	.09	.01	--				
5	Evaluation of Contact with Clients	1.70	0.84	.00	.13	-.15	.20	--			
6	Overall Contact Frequency with Beneficiaries	3.18	0.99	.00	.95**	-.07	.09	.12	--		
7	Overall Contact Duration with Beneficiaries	63.76	139.41	.00	-.06	.98**	.03	-.14	-.07	--	
8	Overall Contact Depth with Beneficiaries	2.43	1.32	.16	.09	.02	.98**	.20	.10	.04	--
9	Overall Evaluation of Contact with Beneficiaries	1.65	0.75	-.01	.14	-.15	.16	.96**	.17	-.14	.15
10	Commitment Bond to Coworkers (count)	8.03	4.33	-.08	.05	.11	-.13	-.01	-.03	.09	-.15
11	Commitment Bond to Clients (count)	30.33	15.39	-.07	.24	.02	.06	-.04	.23	-.03	.01
12	Commitment Bond to Coworkers (strength)	5.12	1.41	.10	-.06	-.05	.08	.24	-.04	-.07	.04
13	Commitment Bond to Clients (strength)	5.04	1.37	-.24*	.22	-.05	-.08	.28*	.26*	-.05	-.12
14	Overall Commitment Bond (strength)	5.32	1.49	.16	-.13	.06	.00	.23	-.10	.02	-.06
15	Retention	0.87	0.34	.18	-.11	-.09	-.05	-.03	-.06	-.13	-.10
16	Intentions to Remain	5.59	2.19	.13	-.06	.07	.10	.24	-.05	.05	.06
17	Job Performance	5.85	0.89	.19	.06	.02	-.08	.09	.09	.01	-.09
18	Prosocial Behaviors	5.69	1.13	.06	.12	.06	.03	.12	.14	.06	.03

TABLE 2 (cont'd)

Variable	9	10	11	12	13	14	15	16	17	18
1 Tenure										
2 Frequency of Contact with Clients										
3 Duration of Contact with Clients										
4 Depth of Contact with Clients										
5 Evaluation of Contact with Clients										
6 Overall Contact Frequency with Beneficiaries										
7 Overall Contact Duration with Beneficiaries										
8 Overall Contact Depth with Beneficiaries										
9 Overall Evaluation of Contact with Beneficiaries	--									
10 Commitment Bond to Coworkers (count)	.01	--								
11 Commitment Bond to Clients (count)	-.01	.47**	--							
12 Commitment Bond to Coworkers (strength)	.28*	.23	.17	--						
13 Commitment Bond to Clients (strength)	.31*	.18	.35**	.32**	--					
14 Overall Commitment Bond (strength)	.21	.19	.14	.75**	.32**	--				
15 Retention	.10	.20	.19	.36**	-.05	.16	--			
16 Intentions to Remain	.25*	-.03	.00	.11	-.01	.03	.28*	(.67)		
17 Job Performance	.12	.25*	.25*	.15	.32**	.00	.13	.23	(.97)	
18 Prosocial Behaviors	.13	.13	.25*	.18	.22	.06	.06	.17	.81**	(.95)

Note. ** = $p < .01$, * = $p < .05$; $n = 67$. All missing data was listwise deleted. Retention is coded 1 = yes, 0 = no. Coefficient alphas are presented on the diagonal.

TABLE 3: Hierarchical Linear Modeling Results for Commitment Bond Formation with Coworkers

Variables	Model 1			Model 2			Model 3		
	B	s.e.	t	B	s.e.	t	B	s.e.	t
<i>Intercept</i>	5.13**	0.17	29.90	5.13**	0.17	29.92	5.31**	0.17	29.35
<i>Level 2 Effects</i>									
Tenure (b_{01})				0.06	0.06	1.03	0.07	0.06	1.07
<i>Level 1 Effects</i>									
Contact Frequency with Coworkers (b_{10})				0.11†	0.06	1.87	0.06	0.05	1.32
Contact Duration with Coworkers (b_{20})				0.00†	0.00	1.83	0.00	0.00	0.44
Contact Depth with Coworkers (b_{30})				0.36**	0.07	4.93	0.21**	0.07	3.06
Evaluation of Contact with Coworkers (b_{40})							0.62**	0.07	8.55
<i>Interactions</i>									
Contact Frequency x Evaluation of Contact with Coworkers (b_{50})							-0.07†	0.04	-1.75
Contact Duration x Evaluation of Contact with Coworkers (b_{60})							0.00	0.00	0.07
Contact Depth x Evaluation of Contact with Coworkers (b_{70})							0.02	0.05	0.49
Pseudo R ² change		.00			.19			.16	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; Level-1 n = 582; Level-2 n = 68; unstandardized regression coefficients reported.

TABLE 4: Hierarchical Regression Results for Commitment Bond Formation with Clients

Variables	Model 1			Model 2			Model 3		
	β	s.e.	t	β	s.e.	t	β	s.e.	t
Constant		0.20	25.91		0.20	26.17		0.26	20.26
Tenure	-.24*	0.06	-2.02	-0.23†	0.06	-1.89	-0.22†	0.06	-1.88
Contact Frequency with Clients				0.22†	0.16	1.84	0.23†	0.17	1.80
Contact Duration with Clients				-0.03	0.00	-0.26	-0.10	0.00	-0.36
Contact Depth with Clients				-0.06	0.11	-0.54	-0.09	0.12	-0.69
Evaluation of Contact with Clients							0.28*	0.22	2.07
Contact Frequency x Evaluation of Contact with Clients							-0.07	0.18	-0.59
Contact Duration x Evaluation of Contact with Clients							-0.15	0.00	-0.59
Contact Depth x Evaluation of Contact with Clients							-0.01	0.14	-0.04
R ²		.06			.11			.20	
ΔR^2					.05			.09	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 68; standardized regression coefficients reported.

TABLE 5: Logistic and Hierarchical Regression Results for Retention and Intentions to Remain

Variables	DV: Retention						DV: Intentions to Remain					
	Model 1			Model 2			Model 1			Model 2		
	B	s.e.	Wald χ^2	B	s.e.	Wald χ^2	β	s.e.	t	β	s.e.	t
Constant	2.39	1.57	2.32	0.95	1.63	0.34		1.08	4.22		1.24	3.76
Tenure	0.69	0.46	2.26	0.68	0.42	2.64	0.13	0.09	1.04	0.13	0.10	1.04
Contact Frequency	-0.40	0.42	0.93	-0.53	0.46	1.37	-0.09	0.27	-0.71	-0.11	0.29	-0.84
Contact Duration	0.00	0.00	1.07	0.00	0.00	1.61	0.08	0.00	0.66	0.09	0.00	0.72
Contact Depth	-0.33	0.28	1.40	-0.27	0.31	0.79	0.01	0.21	0.06	0.00	0.21	-0.03
Evaluation of Contact	0.52	0.51	1.05	0.53	0.56	0.90	0.27*	0.36	2.18	0.28*	0.37	2.20
Commitment Bond Formation with Coworkers				0.13	0.11	1.35				-0.07	0.07	-0.52
Commitment Bond Formation with Clients				0.03	0.03	1.05				0.08	0.02	0.53
R ²		.11			.17			.09			.10	
ΔR^2					.06						.01	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 68; unstandardized regression coefficients reported for logistic regression; standardized regression coefficients reported for hierarchical regression.

TABLE 6: Hierarchical Regression Results for Job Performance and Prosocial Behaviors

Variables	DV: Job Performance						DV: Prosocial Behaviors					
	Model 1			Model 2			Model 1			Model 2		
	β	s.e.	t	β	s.e.	t	β	s.e.	t	β	s.e.	t
Constant		0.45	12.20		0.49	10.06		0.57	8.47		0.64	6.95
Tenure	0.21	0.04	1.72	0.23†	0.04	1.94	0.06	0.05	0.52	0.08	0.05	0.67
Contact Frequency	0.09	0.11	0.70	0.05	0.11	0.36	0.13	0.14	1.03	0.08	0.15	0.58
Contact Duration	0.04	0.00	0.35	0.03	0.00	0.27	0.08	0.00	0.66	0.09	0.00	0.69
Contact Depth	-0.16	0.09	-1.25	-0.14	0.08	-1.11	-0.02	0.11	-0.12	-0.01	0.11	-0.10
Evaluation of Contact	0.14	0.15	1.08	0.14	0.15	1.14	0.12	0.19	0.94	0.13	0.19	1.03
Commitment Bond Formation with Coworkers				0.14	0.03	1.05				0.02	0.04	0.13
Commitment Bond Formation with Clients				0.20	0.01	1.42				0.23	.011	1.61
R ²		.08			.16			.04			.10	
ΔR^2					.08						.06	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 68; standardized regression coefficients reported.

TABLE 7: Polynomial Regression Results for Retention and Intentions to Remain

Variables	DV: Retention				DV: Intentions to Remain			
	Model 1		Model 2		Model 1		Model 2	
	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Constant	2.39	1.57	4.08*	1.92	4.57*	1.08	5.02**	1.19
Tenure	0.69	0.46	0.88	0.50	0.10	0.09	0.09	0.10
Contact Frequency	-0.40	0.42	-0.70	0.50	-0.19	0.27	-0.22	0.29
Contact Duration	0.00	0.00	0.00†	0.00	0.00	0.00	0.00	0.00
Contact Depth	-0.33	0.28	-0.17	0.35	0.01	0.21	0.12	0.23
Evaluation of Contact	0.52	0.51	0.54	0.60	0.80*	0.36	0.77*	0.37
<i>Polynomial Terms</i>								
Commitment Bond Formation to Coworkers (b ₁)			0.12	0.13			-0.03	0.07
Commitment Bond Formation to Clients (b ₂)			0.03	0.03			0.00	0.02
Commitment Bond Formation to Coworkers ² (b ₃)			-0.01	0.03			-0.01	0.02
Commitment Bond Formation to Coworkers x Commitment Bond Formation to Clients (b ₄)			0.01	0.01			0.00	0.01
Commitment Bond Formation to Clients ² (b ₅)			0.00*	0.00			0.00	0.00
R ²	.11		.23		.09		.15	
ΔR ²			.12				.06	
<i>Congruence (I = E) Line</i>								
Slope (b ₁ + b ₂)			0.15	0.12			-0.03	0.63
Curvature (b ₃ + b ₄ + b ₅)			0.00	0.03			-0.01	0.02
<i>Incongruence (I = -E) Line</i>								
Slope (b ₁ - b ₂)			0.09	0.15			-0.03	0.08
Curvature (b ₃ - b ₄ + b ₅)			-0.02	0.03			-0.01	0.02
χ ² difference for the three quadratic terms			9.24					
F for the three quadratic terms							1.25	
ΔR ² for the three quadratic terms			.10				.06	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 67 for retention, n = 68 for intentions to remain; unstandardized regression coefficients reported.

TABLE 8: Polynomial Regression Results for Job Performance and Prosocial Behaviors

Variables	DV: Job Performance				DV: Prosocial Behaviors			
	Model 1		Model 2		Model 1		Model 2	
	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Constant	5.44**	0.45	5.56**	0.48	4.85**	0.57	5.02**	0.62
Tenure	0.07†	0.04	0.07†	0.04	0.03	0.05	0.04	0.05
Contact Frequency	0.08	0.11	0.04	0.12	0.15	0.14	0.07	0.15
Contact Duration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contact Depth	-0.11	0.09	-0.14	0.09	-0.01	0.11	-0.06	0.12
Evaluation of Contact	0.16	0.15	0.18	0.15	0.18	0.19	0.22	0.19
<i>Polynomial Terms</i>								
Commitment Bond Formation to Coworkers (b ₁)			0.03	0.03			0.00	0.04
Commitment Bond Formation to Clients (b ₂)			0.01	0.01			0.02	0.01
Commitment Bond Formation to Coworkers ² (b ₃)			0.00	0.01			0.00	0.01
Commitment Bond Formation to Coworkers X Commitment Bond Formation to Clients (b ₄)			0.00	0.00			0.00	0.00
Commitment Bond Formation to Clients ² (b ₅)			0.00	0.00			0.00	0.00
R ²	.08		.18		.04		.13	
ΔR ²			.10				.09	
<i>Congruence (I = E) Line</i>								
Slope (b ₁ + b ₂)			0.04	0.03			0.02	0.03
Curvature (b ₃ + b ₄ + b ₅)			0.00	0.01			0.00	0.01
<i>Incongruence (I = -E) Line</i>								
Slope (b ₁ - b ₂)			0.02	0.03			-0.02	0.04
Curvature (b ₃ - b ₄ + b ₅)			0.00	0.01			0.00	0.01
F for the three quadratic terms			.54				.78	
ΔR ² for the three quadratic terms			.02				.04	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 68; unstandardized regression coefficients reported.

TABLE 9: Logistic and Hierarchical Regression Results for Retention and Intentions to Remain on Commitment Strength

Variables	DV: Retention						DV: Intentions to Remain					
	Model 1			Model 2			Model 1			Model 2		
	B	s.e.	Wald χ^2	B	s.e.	Wald χ^2	β	s.e.	t	β	s.e.	t
Constant	2.05	1.65	1.55	-0.70	2.34	0.09		1.09	4.20		1.55	3.01
Tenure	0.69	0.48	2.06	0.56	0.52	1.20	0.13	0.10	1.04	0.11	0.10	0.85
Contact Frequency	-0.27	0.44	0.36	-0.07	0.53	0.00	-0.09	0.27	-0.73	-0.07	0.29	-0.56
Contact Duration	0.00	0.00	1.19	0.00	0.00	1.03	0.08	0.00	0.66	0.08	0.00	0.67
Contact Depth	-0.37	0.29	1.61	-0.46	0.35	1.86	0.01	0.21	0.06	0.00	0.22	-0.01
Evaluation of Contact	0.58	0.52	1.24	0.50	0.58	0.58	0.27*	0.37	2.16	0.28*	0.40	2.03
Commitment Strength to Coworkers				0.91*	0.36	6.57				0.04	0.22	0.27
Commitment Strength to Clients				-0.29	0.39	0.53				-0.06	0.24	-0.39
R ²		.11			.21			.09			.10	
ΔR^2					.10						.01	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 67; unstandardized regression coefficients reported for logistic regression; standardized regression coefficients reported for hierarchical regression.

TABLE 10: Hierarchical Regression Results for Job Performance and Prosocial Behaviors on Commitment Strength

Variables	DV: Job Performance						DV: Prosocial Behaviors					
	Model 1			Model 2			Model 1			Model 2		
	B	s.e.	t	B	s.e.	t	β	s.e.	t	β	s.e.	t
Constant		0.45	12.07		0.60	7.53		0.58	8.39		0.80	4.86
Tenure	0.21 [†]	0.04	1.71	0.29 [†]	0.04	2.34	0.07	0.05	0.52	0.09	0.05	0.69
Contact Frequency	0.08	0.11	0.67	0.00	0.11	0.00	0.13	0.15	1.00	0.10	0.15	0.74
Contact Duration	0.04	0.00	0.35	0.04	0.00	0.31	0.08	0.00	0.65	0.08	0.00	0.66
Contact Depth	-0.16	0.09	-1.24	-0.10	0.08	-0.82	-0.01	0.11	-0.12	0.01	0.11	0.10
Evaluation of Contact	0.14	0.15	1.07	0.03	0.16	0.22	0.12	0.19	0.92	0.03	0.21	0.25
Commitment Strength to Coworkers				0.00	0.08	-0.01				0.11	0.11	0.81
Commitment Strength to Clients				0.37*	0.09	2.60				0.18	0.12	1.17
R ²		.08			.18			.04			.09	
ΔR^2					.10						.05	

Note. ** = $p < .01$, * = $p < .05$, [†] = $p < .10$; n = 66; standardized regression coefficients reported for hierarchical regression.

TABLE 11: Polynomial Regression Results for Retention and Intentions to Remain on Commitment Strength

Variables	DV: Retention				DV: Intentions to Remain			
	Model 1		Model 2		Model 1		Model 2	
	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Constant	2.05	1.65	5.85†	3.06	4.59**	1.09	4.75**	1.21
Tenure	0.69	0.48	1.16	1.22	0.10	0.10	0.05	0.10
Contact Frequency	-0.27	0.44	0.56	0.76	-0.20	0.27	-0.14	0.29
Contact Duration	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00
Contact Depth	-0.37	0.29	-0.24	0.56	0.01	0.21	0.06	0.21
Evaluation of Contact	0.58	0.52	-0.99	1.08	0.79*	0.37	0.71†	0.40
<i>Polynomial Terms</i>								
Commitment Strength to Coworkers (b ₁)			5.25*	2.19			0.13	0.24
Commitment Strength to Clients (b ₂)			-1.31	0.85			-0.10	0.24
Commitment Strength to Coworkers ² (b ₃)			1.35*	0.57			0.12	0.12
Commitment Strength to Coworkers x Commitment Strength to Clients (b ₄)			0.08	0.41			0.28	0.19
Commitment Strength to Clients ² (b ₅)			-1.20†	0.68			-0.33†	0.18
R ²	.11		.38		.09		.16	
ΔR ²			.27				.07	
<i>Congruence (I = E) Line</i>								
Slope (b ₁ + b ₂)			3.94*	1.87			0.03	0.27
Curvature (b ₃ + b ₄ + b ₅)			0.23	0.57			0.07	0.17
<i>Incongruence (I = -E) Line</i>								
Slope (b ₁ - b ₂)			6.55*	2.75			0.23	0.40
Curvature (b ₃ - b ₄ + b ₅)			0.07	0.76			-0.49	0.37
χ ² difference for the three quadratic terms			23.88					
F for the three quadratic terms							1.53	
ΔR ² for the three quadratic terms			.16				.07	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 67 for retention, n = 68 for intentions to remain; unstandardized regression coefficients reported.

TABLE 12: Polynomial Regression Results for Job Performance and Prosocial Behaviors on Commitment Strength

Variables	DV: Job Performance				DV: Prosocial Behaviors			
	Model 1		Model 2		Model 1		Model 2	
	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Constant	5.44**	0.45	5.97**	0.47	4.86**	0.58	5.18**	0.64
Tenure	0.07†	0.04	0.08*	0.04	0.03	0.05	0.02	0.05
Contact Frequency	0.08	0.11	0.00	0.11	0.14	0.15	0.12	0.15
Contact Duration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contact Depth	-0.11	0.09	-0.05	0.08	-0.01	0.11	0.03	0.11
Evaluation of Contact	0.16	0.15	0.00	0.16	0.18	0.19	0.01	0.21
<i>Polynomial Terms</i>								
Commitment Strength to Coworkers (b_1)			0.00	0.10			0.12	0.13
Commitment Strength to Clients (b_2)			0.25*	0.09			0.14	0.13
Commitment Strength to Coworkers ² (b_3)			0.01	0.05			0.05	0.07
Commitment Strength to Coworkers x Commitment Strength to Clients (b_4)			0.06	0.07			0.09	0.10
Commitment Strength to Clients ² (b_5)			-0.13†	0.07			-0.12	0.10
R ²	.08		.23		.04		.12	
ΔR^2			.15				.08	
<i>Congruence ($I = E$) Line</i>								
Slope ($b_1 + b_2$)			-0.25*	0.11			0.26†	0.14
Curvature ($b_3 + b_4 + b_5$)			-0.06	0.07			0.02	0.09
<i>Incongruence ($I = -E$) Line</i>								
Slope ($b_1 - b_2$)			-0.25	0.16			-0.02	0.22
Curvature ($b_3 - b_4 + b_5$)			-0.18	0.17			-0.16	0.23
F for the three quadratic terms			1.12				.76	
ΔR^2 for the three quadratic terms			.05				.04	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 68; unstandardized regression coefficients reported.

TABLE 13: Logistic and Hierarchical Regression Results for Retention and Intentions to Remain on Group Commitment

Variables	DV: Retention						DV: Intentions to Remain					
	Model 1			Model 2			Model 1			Model 2		
	B	s.e.	Wald χ^2	B	s.e.	Wald χ^2	β	s.e.	t	β	s.e.	t
Constant	2.36	1.55	2.30	0.05	2.49	0.00		1.09	4.19		1.83	1.18
Tenure	0.71	0.45	2.50	0.71	0.44	2.56	0.13	0.10	1.02	0.12	0.10	1.01
Contact Frequency	-0.47	0.42	1.24	-0.49	0.43	1.30	-0.09	0.27	-0.69	-0.09	0.27	-0.73
Contact Duration	0.00	0.00	0.89	0.00	0.00	1.12	0.08	0.00	0.65	0.06	0.00	0.52
Contact Depth	-0.47	0.31	2.36	-0.56†	0.33	2.96	0.01	0.22	0.07	-0.03	0.22	-0.20
Evaluation of Contact	0.85	0.59	2.08	0.67	0.62	1.18	0.26*	0.39	2.02	0.23†	0.39	1.73
Group Commitment to Coworkers				0.43	0.46	0.87				0.14	0.34	0.92
Group Commitment to Clients				0.18	0.48	0.15				0.10	0.36	0.67
R ²		.13			.16			.08			.13	
ΔR^2					.03						.05	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 67 for retention, n = 68 for intentions to remain; unstandardized regression coefficients reported for logistic regression; standardized regression coefficients reported for hierarchical regression.

TABLE 14: Hierarchical Regression Results for Job Performance and Prosocial Behaviors on Group Commitment

Variables	DV: Job Performance						DV: Prosocial Behaviors					
	Model 1			Model 2			Model 1			Model 2		
	β	s.e.	t	B	s.e.	t	β	s.e.	t	β	s.e.	t
Constant		0.43	12.90		0.72	7.22		0.57	8.49		0.96	5.37
Tenure	0.20	0.04	1.55	0.19	0.04	1.48	0.06	0.05	0.43	0.04	0.05	0.33
Contact Frequency	0.13	0.11	0.99	0.14	0.11	1.07	0.14	0.14	1.11	0.17	0.14	1.32
Contact Duration	0.02	0.00	0.19	0.02	0.00	0.19	0.08	0.00	0.60	0.09	0.00	0.71
Contact Depth	-0.07	0.08	-0.51	-0.10	0.09	-0.73	0.02	0.11	0.13	-0.01	0.12	-0.10
Evaluation of Contact	0.02	0.15	0.16	0.00	0.15	0.02	0.08	0.21	0.58	0.07	0.21	0.54
Group Commitment to Coworkers				0.19	0.14	1.20				0.25	0.18	1.59
Group Commitment to Clients				-0.08	0.14	-0.51				-0.24	0.19	-1.53
R ²		.07			.08			.03			.09	
ΔR^2					.01						.06	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 66; standardized regression coefficients reported for hierarchical regression.

TABLE 15: Polynomial Regression Results for Retention and Intentions to Remain on Group Commitment

Variables	DV: Retention				DV: Intentions to Remain			
	Model 1		Model 2		Model 1		Model 2	
	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Constant	2.36	1.55	3.06 [†]	1.76	4.57**	1.09	5.32**	1.15
Tenure	0.71	0.45	0.71	0.45	0.10	0.10	0.10	0.10
Contact Frequency	-0.47	0.42	-0.44	0.46	-0.19	0.27	-0.22	0.28
Contact Duration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contact Depth	-0.47	0.31	-0.56	0.34	0.02	0.22	0.01	0.22
Evaluation of Contact	0.85	0.59	0.64	0.65	0.79*	0.39	0.55	0.40
<i>Polynomial Terms</i>								
Group Commitment to Coworkers (b ₁)			0.29	0.51			0.32	0.36
Group Commitment to Clients (b ₂)			0.23	0.58			0.22	0.40
Group Commitment to Coworkers ² (b ₃)			-0.17	0.32			0.01	0.26
Group Commitment to Coworkers x Group Commitment to Clients (b ₄)			0.00	0.47			-0.58	0.38
Group Commitment to Clients ² (b ₅)			0.03	0.44			0.07	0.32
R ²	.13		.15		.08		.18	
ΔR ²			.02				.10	
<i>Congruence (I = E) Line</i>								
Slope (b ₁ + b ₂)			0.52	0.57			0.54	.35
Curvature (b ₃ + b ₄ + b ₅)			-0.14	0.49			-0.50	.33
<i>Incongruence (I = -E) Line</i>								
Slope (b ₁ - b ₂)			0.06	0.93			0.10	.69
Curvature (b ₃ - b ₄ + b ₅)			-0.14	0.86			0.66	.70
χ ² difference for the quadratic terms			2.04					
F for the three quadratic terms							1.11	
ΔR ² for the three quadratic terms			.00				.05	

Note. ** = $p < .01$, * = $p < .05$, [†] = $p < .10$; n = 67 for retention, n = 68 for intentions to remain; unstandardized regression coefficients reported.

TABLE 16: Polynomial Regression Results for Job Performance and Prosocial Behaviors on Group Commitment

Variables	DV: Job Performance				DV: Prosocial Behaviors			
	Model 1		Model 2		Model 1		Model 2	
	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Constant	5.49**	0.43	5.57**	0.46	4.88**	0.57	4.76**	0.61
Tenure	0.06	0.04	0.06	0.04	0.02	0.05	0.01	0.05
Contact Frequency	0.11	0.11	0.10	0.11	0.16	0.14	0.15	0.15
Contact Duration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contact Depth	-0.04	0.08	-0.05	0.09	0.02	0.11	-0.01	0.12
Evaluation of Contact	0.02	0.15	-0.01	0.16	0.12	0.21	0.18	0.21
<i>Polynomial Terms</i>								
Commitment Bond Formation to Coworkers (b_1)			0.18	0.15			0.38†	0.19
Commitment Bond Formation to Clients (b_2)			-0.09	0.16			-0.37†	0.21
Commitment Bond Formation to Coworkers ² (b_3)			0.05	0.10			0.20	0.14
Commitment Bond Formation to Coworkers X Commitment Bond Formation to Clients (b_4)			-0.12	0.15			-0.02	0.20
Commitment Bond Formation to Clients ² (b_5)			0.01	0.13			-0.07	0.17
R ²	.05		.09		.04		.12	
ΔR^2			.04				.08	
<i>Congruence ($I = E$) Line</i>								
Slope ($b_1 + b_2$)			0.08	0.14			0.01	0.18
Curvature ($b_3 + b_4 + b_5$)			-0.06	0.13			0.11	0.18
<i>Incongruence ($I = -E$) Line</i>								
Slope ($b_1 - b_2$)			0.27	0.28			0.75*	0.37
Curvature ($b_3 - b_4 + b_5$)			0.18	0.28			0.15	0.37
F for the three quadratic terms			.23				.78	
ΔR^2 for the three quadratic terms			.01				.04	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; n = 68; unstandardized regression coefficients reported.

TABLE 17: Commitment Measures Summary

Measure	Description	Target	Scale	Reference
Commitment Bond Count	Dichotomous measure assessing existence of commitment bond to a specific individual	Individual	1 = no; 2 = yes	Adapted from Klein et al., (2012)
Commitment Bond Strength	2-item continuous measure assessing extent of commitment bond to a specific individual	Individual	1 = not at all; 7 = completely	Klein et al. (2014)
Group Commitment	9-item continuous measure for general commitment to a group	Group	1 = strongly disagree; 7 = strongly agree	Meyer et al. (1993)

TABLE 18: Comparison of Logistic and Hierarchical Regression Results

Measure	Dependent Variable			
	Retention	Intentions to Remain	Job Performance	Prosocial Behaviors
<i>Commitment Bond Count</i>				
Individual Coworker	B = .13, <i>n.s.</i>	$\beta = -.07, n.s.$	$\beta = .14, n.s.$	$\beta = .02, n.s.$
Individual Clients	B = .03, <i>n.s.</i>	$\beta = .08, n.s.$	$\beta = .20, n.s.$	$\beta = .23, n.s.$
<i>Commitment Bond Strength</i>				
Individual Coworker	B = .91, <i>p</i> < .05	$\beta = .04, n.s.$	$\beta = .00, n.s.$	$\beta = .11, n.s.$
Individual Client	B = -.29, <i>n.s.</i>	$\beta = -.06, n.s.$	$\beta = .37, p < .05$	$\beta = .18, n.s.$
<i>Group Commitment</i>				
Coworkers	B = .43	$\beta = .14, n.s.$	$\beta = .19, n.s.$	$\beta = .25, n.s.$
Clients	B = .18	$\beta = .10, n.s.$	$\beta = -.08, n.s.$	$\beta = -.24, n.s.$

TABLE 19: Comparison of Polynomial Regression Results

	Dependent Variable			
	Retention	Intentions to Remain	Job Performance	Prosocial Behaviors
<i>Commitment Bond Count</i>				
<i>Congruence ($I = E$) Line</i>				
Slope ($b_1 + b_2$)	B = .15, <i>n.s.</i>	B = -.03, <i>n.s.</i>	B = .03, <i>n.s.</i>	B = .02, <i>n.s.</i>
Curvature ($b_3 + b_4 + b_5$)	B = .00, <i>n.s.</i>	B = -.01, <i>n.s.</i>	B = .00, <i>n.s.</i>	B = .00, <i>n.s.</i>
<i>Incongruence ($I = -E$) Line</i>				
Slope ($b_1 - b_2$)	B = .09, <i>n.s.</i>	B = -.03, <i>n.s.</i>	B = .12, <i>n.s.</i>	B = -.02, <i>n.s.</i>
Curvature ($b_3 - b_4 + b_5$)	B = -.02, <i>n.s.</i>	B = -.01, <i>n.s.</i>	B = .01, <i>n.s.</i>	B = .00, <i>n.s.</i>
<i>Commitment Bond Strength</i>				
<i>Congruence ($I = E$) Line</i>				
Slope ($b_1 + b_2$)	B = 3.94, $p < .05$	B = .03, <i>n.s.</i>	B = -.25, $p < .05$	B = .26, $p < .10$
Curvature ($b_3 + b_4 + b_5$)	B = .23, <i>n.s.</i>	B = .07, <i>n.s.</i>	B = -.06, <i>n.s.</i>	B = .02, <i>n.s.</i>
<i>Incongruence ($I = -E$) Line</i>				
Slope ($b_1 - b_2$)	B = 6.55, $p < .05$	B = .23, <i>n.s.</i>	B = -.25, <i>n.s.</i>	B = -.02, <i>n.s.</i>
Curvature ($b_3 - b_4 + b_5$)	B = .07, <i>n.s.</i>	B = -.49, <i>n.s.</i>	B = -.18, <i>n.s.</i>	B = -.16, <i>n.s.</i>
<i>Group Commitment</i>				
<i>Congruence ($I = E$) Line</i>				
Slope ($b_1 + b_2$)	B = .52, <i>n.s.</i>	B = .54, <i>n.s.</i>	B = .08, <i>n.s.</i>	B = .01, <i>n.s.</i>
Curvature ($b_3 + b_4 + b_5$)	B = -.14, <i>n.s.</i>	B = -.50, <i>n.s.</i>	B = -.06, <i>n.s.</i>	B = .11, <i>n.s.</i>
<i>Incongruence ($I = -E$) Line</i>				
Slope ($b_1 - b_2$)	B = .06, <i>n.s.</i>	B = .10, <i>n.s.</i>	B = .27, <i>n.s.</i>	B = .75, $p < .05$
Curvature ($b_3 - b_4 + b_5$)	B = -.14, <i>n.s.</i>	B = .66, <i>n.s.</i>	B = .18, <i>n.s.</i>	B = .15, <i>n.s.</i>

TABLE 20: Cross-Level Moderating Effect of Number of Commitment Bonds to Clients

Variables	Model 1			Model 2			Model 3		
	B	s.e.	t	B	s.e.	t	B	s.e.	t
<i>Intercept</i>	5.13**	0.17	29.90	5.12**	0.17	30.01	5.12**	0.17	30.01
<i>Level 2 Effects</i>									
Tenure (b_{01})	0.06	0.06	1.00	0.07	0.06	1.08	0.07	0.06	1.08
Commitment to Clients (b_{02})				0.01	0.01	0.93	0.01	0.01	0.93
<i>Level 1 Effects</i>									
Contact Frequency with Coworkers (b_{10})				0.11†	0.06	1.87	0.12†	0.07	1.74
Contact Duration with Coworkers (b_{20})				0.00†	0.00	1.83	0.00	0.00	1.40
Contact Depth with Coworkers (b_{30})				0.36**	0.07	4.93	0.36**	0.07	4.95
<i>Cross-Level Interactions</i>									
Contact Frequency with Coworkers x Commitment to Clients (b_{12})							0.00	0.00	0.24
Contact Duration with Coworkers x Commitment to Clients (b_{22})							-0.00	0.00	-1.19
Contact Depth with Coworkers x Commitment to Clients (b_{32})							-0.00	0.00	-0.38
Pseudo R ² change		.00			.19			.00	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; Level-1 n = 519; Level-2 n = 64; unstandardized regression coefficients reported.

TABLE 21: Cross-Level Moderating Effect of Strength of Commitment Bonds to Clients

Variables	Model 1			Model 2			Model 3		
	B	s.e.	t	B	s.e.	t	B	s.e.	t
<i>Intercept</i>	5.13**	0.17	29.90	5.14**	0.16	32.49	5.14**	0.16	32.49
<i>Level 2 Effects</i>									
Tenure (b_{01})	0.06	0.06	1.00	0.11†	0.06	1.97	0.11†	0.06	1.97
Commitment to Clients (b_{02})				0.39**	0.10	3.86	0.39**	0.10	3.85
<i>Level 1 Effects</i>									
Contact Frequency with Coworkers (b_{10})				0.11†	0.06	1.87	0.10	0.07	1.47
Contact Duration with Coworkers (b_{20})				0.00†	0.00	1.83	0.00**	0.00	2.80
Contact Depth with Coworkers (b_{30})				0.36**	0.07	4.93	0.34**	0.06	5.86
<i>Cross-Level Interactions</i>									
Contact Frequency with Coworkers x Commitment to Clients (b_{12})							0.03	0.05	0.60
Contact Duration with Coworkers x Commitment to Clients (b_{22})							-0.00*	0.00	-2.08
Contact Depth with Coworkers x Commitment to Clients (b_{32})							-0.12**	0.04	-3.38
Pseudo R ² change		.00			.19			.05	

Note. ** = $p < .01$, * = $p < .05$, † = $p < .10$; Level-1 n = 587; Level-2 n = 64; unstandardized regression coefficients reported.

FIGURE 1: Theoretical Model

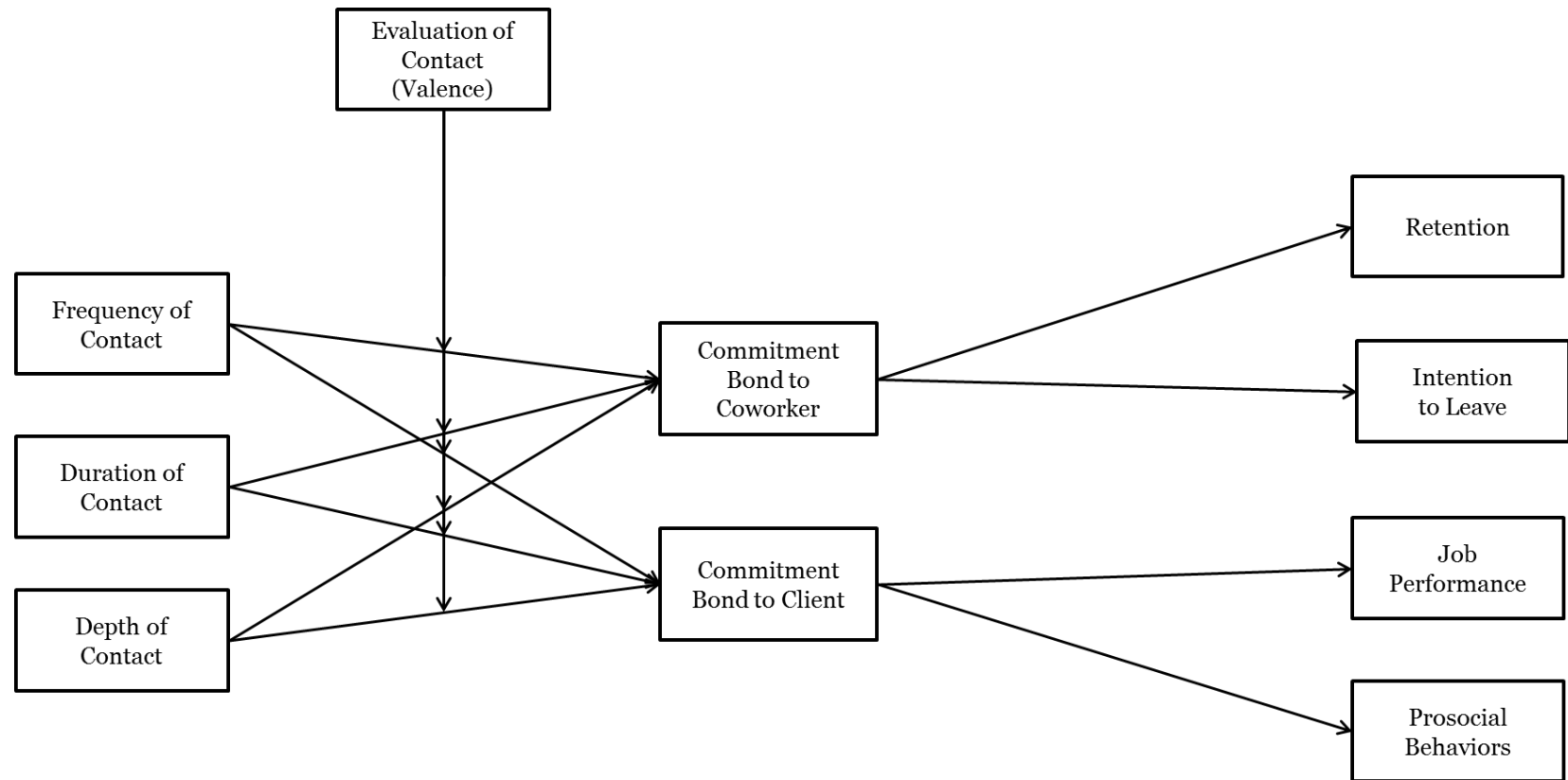


FIGURE 2: Varying Distributions of Commitment Bonds to Coworkers and Clients

		Commitment Bonds to Clients	
		Few	Many
Commitment Bonds to Coworkers	Many	C Retain low performers	B Retain high performers
	Few	A Lose low performers	D Lose high performers

FIGURE 3: Moderating Effect of Evaluation of Contact on the Relationship Between Frequency of Contact and Commitment

Bond Formation to Coworkers

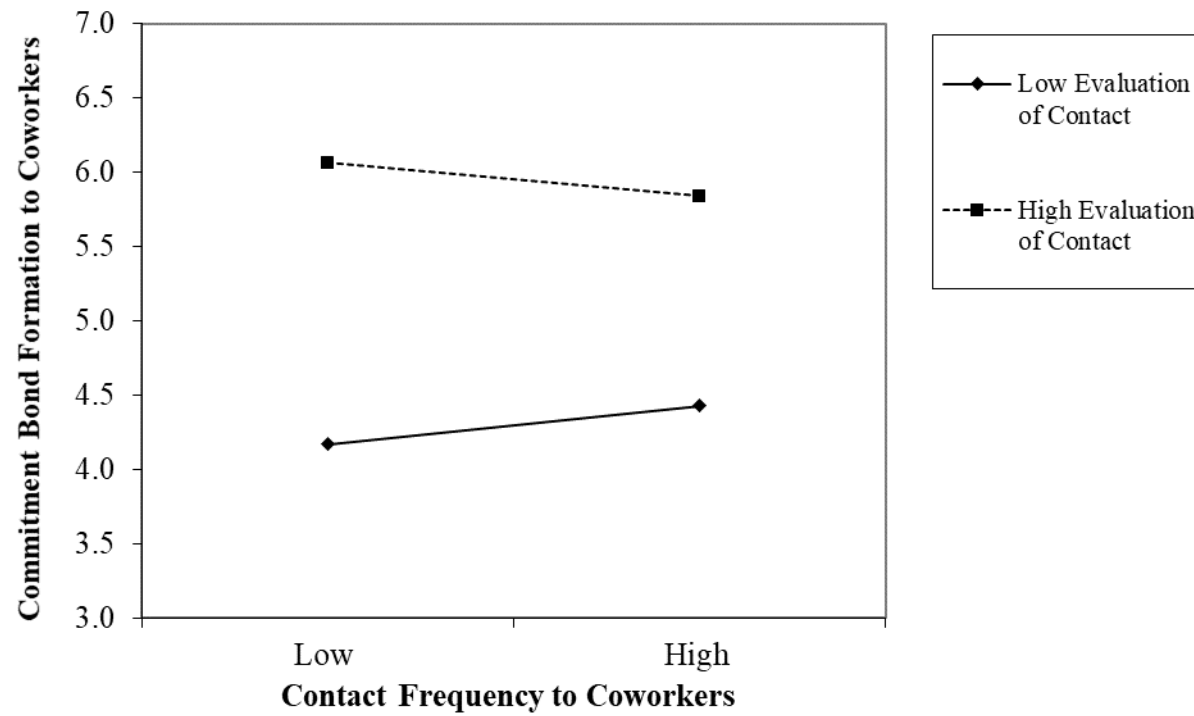


FIGURE 4: Congruence and Incongruence Effects of Number of Commitment Bonds to Coworkers and Number of Commitment Bonds to Clients on Retention

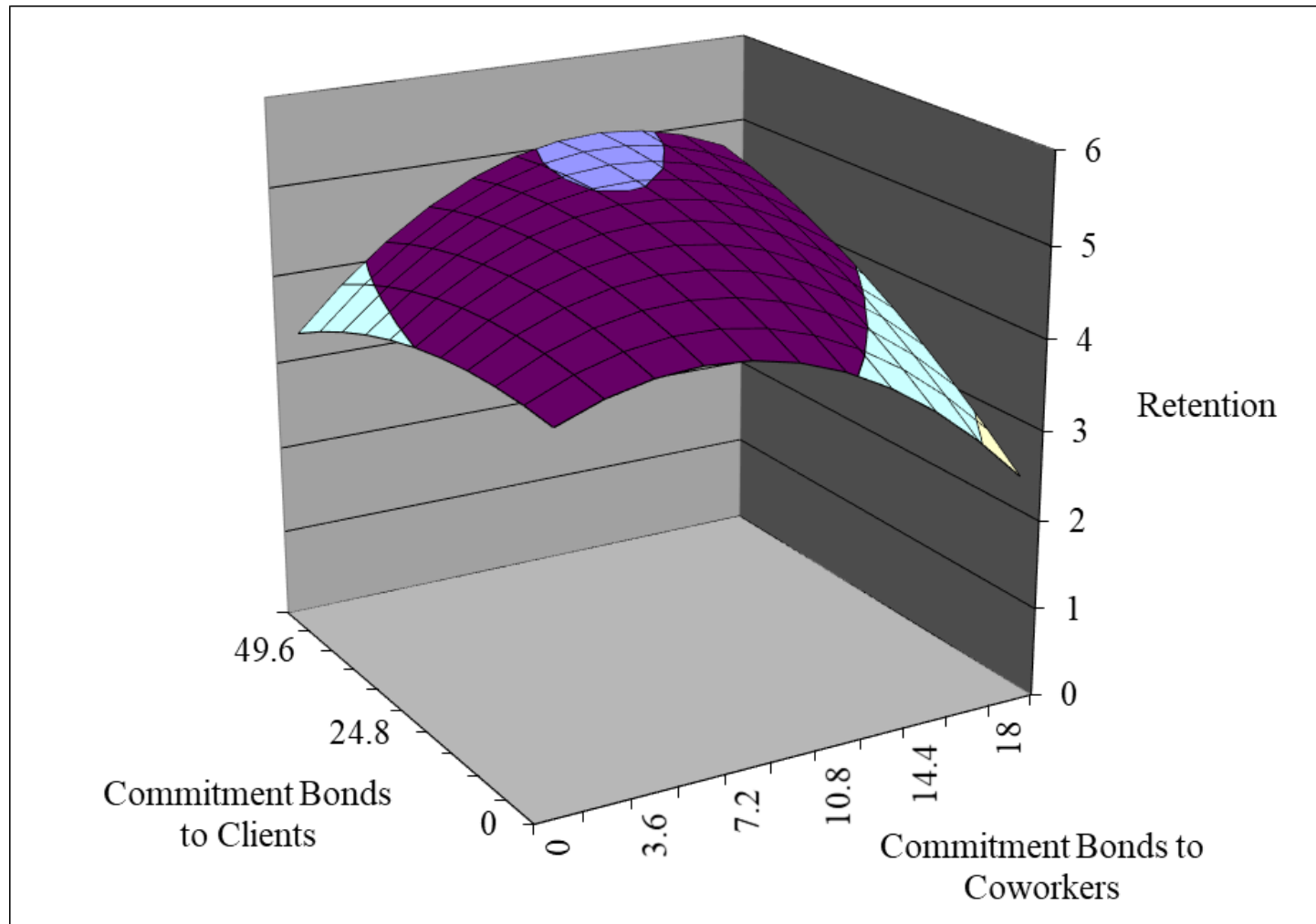


FIGURE 5: Congruence and Incongruence Effects of Number of Commitment Bonds to Coworkers and Number of Commitment Bonds to Clients on Intentions to Remain

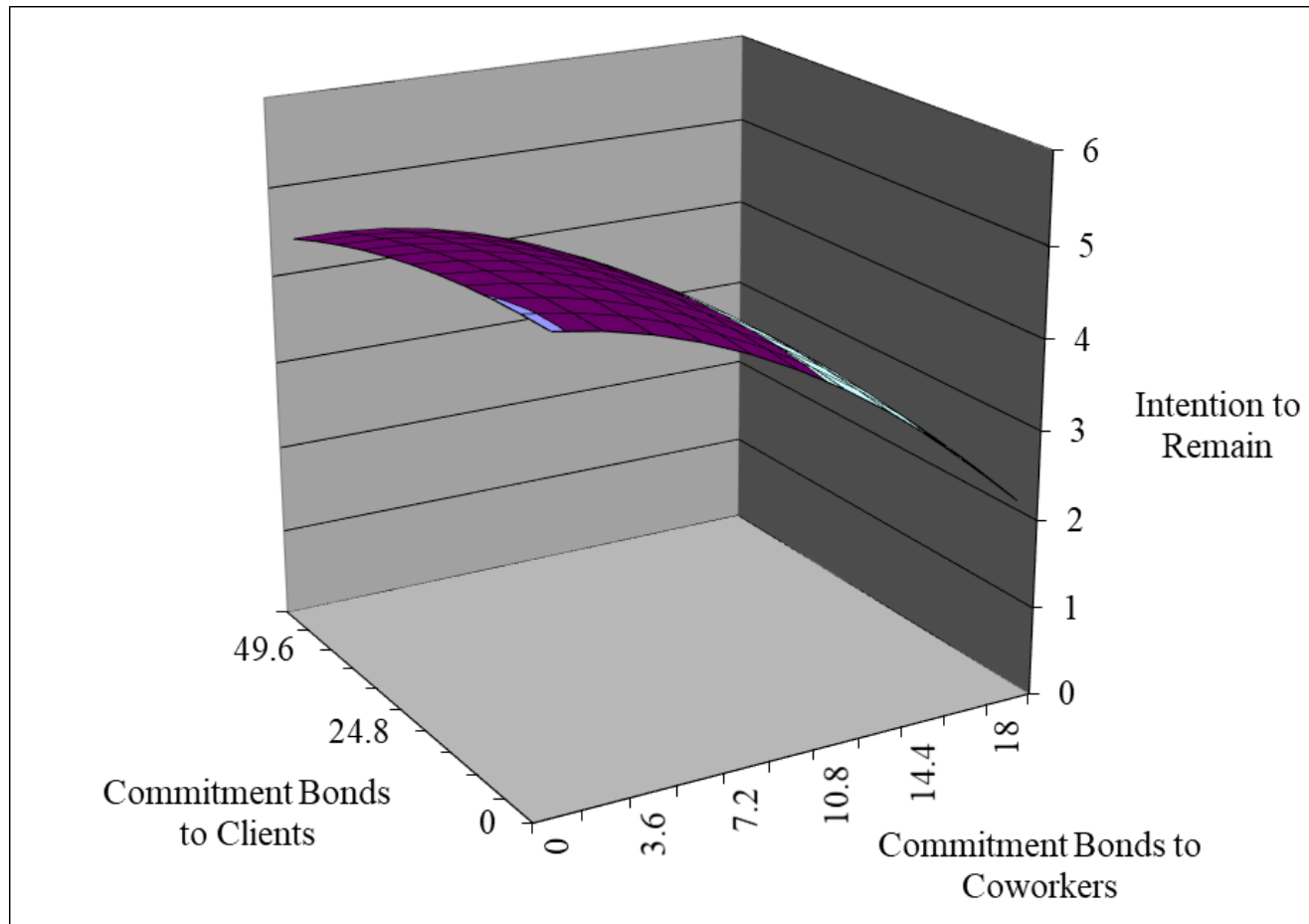


FIGURE 6: Congruence and Incongruence Effects of Number of Commitment Bonds to Coworkers and Number of Commitment Bonds to Clients on Job Performance

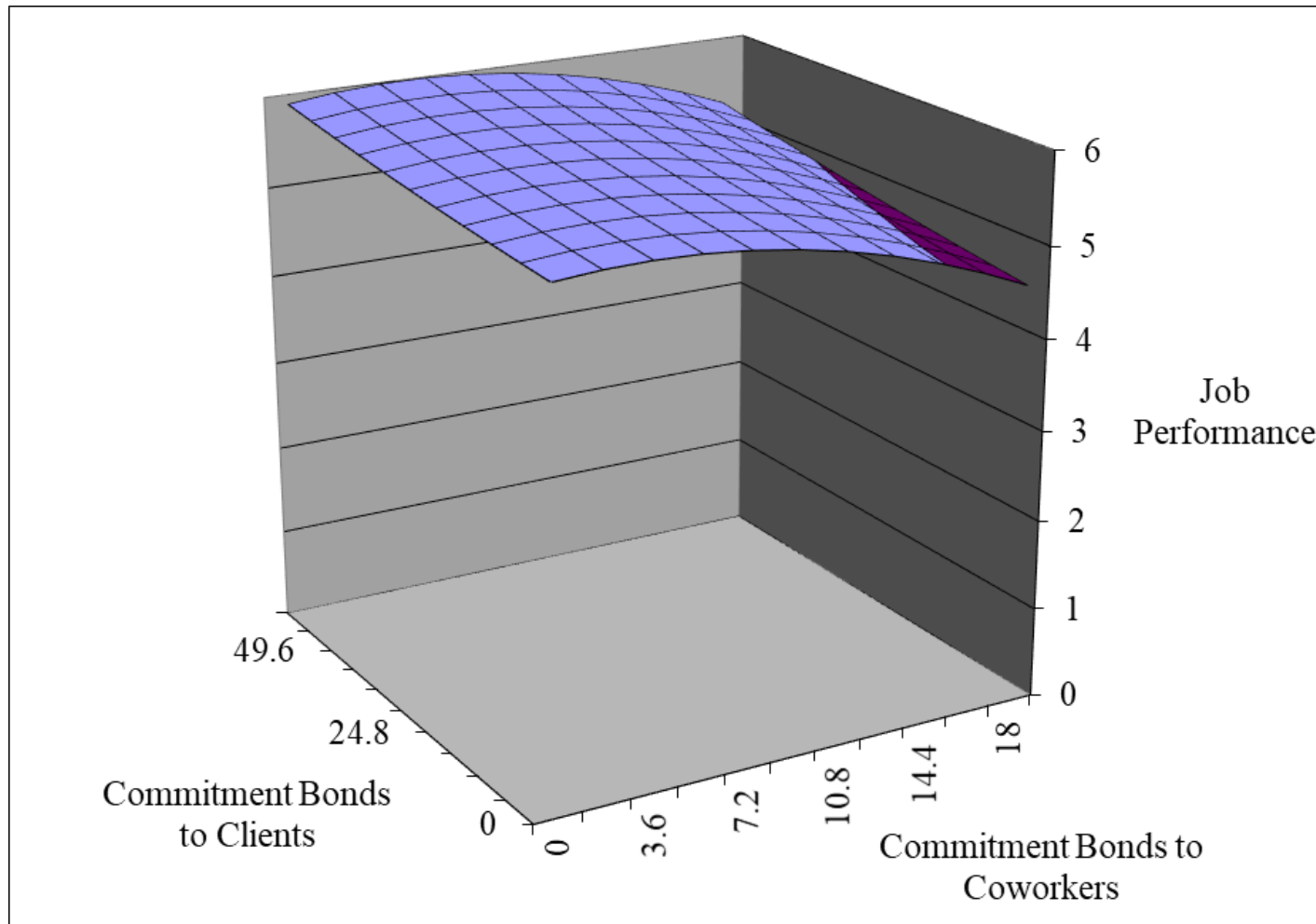


FIGURE 7: Congruence and Incongruence Effects of Number of Commitment Bonds to Coworkers and Number of Commitment Bonds to Clients on Prosocial Behaviors

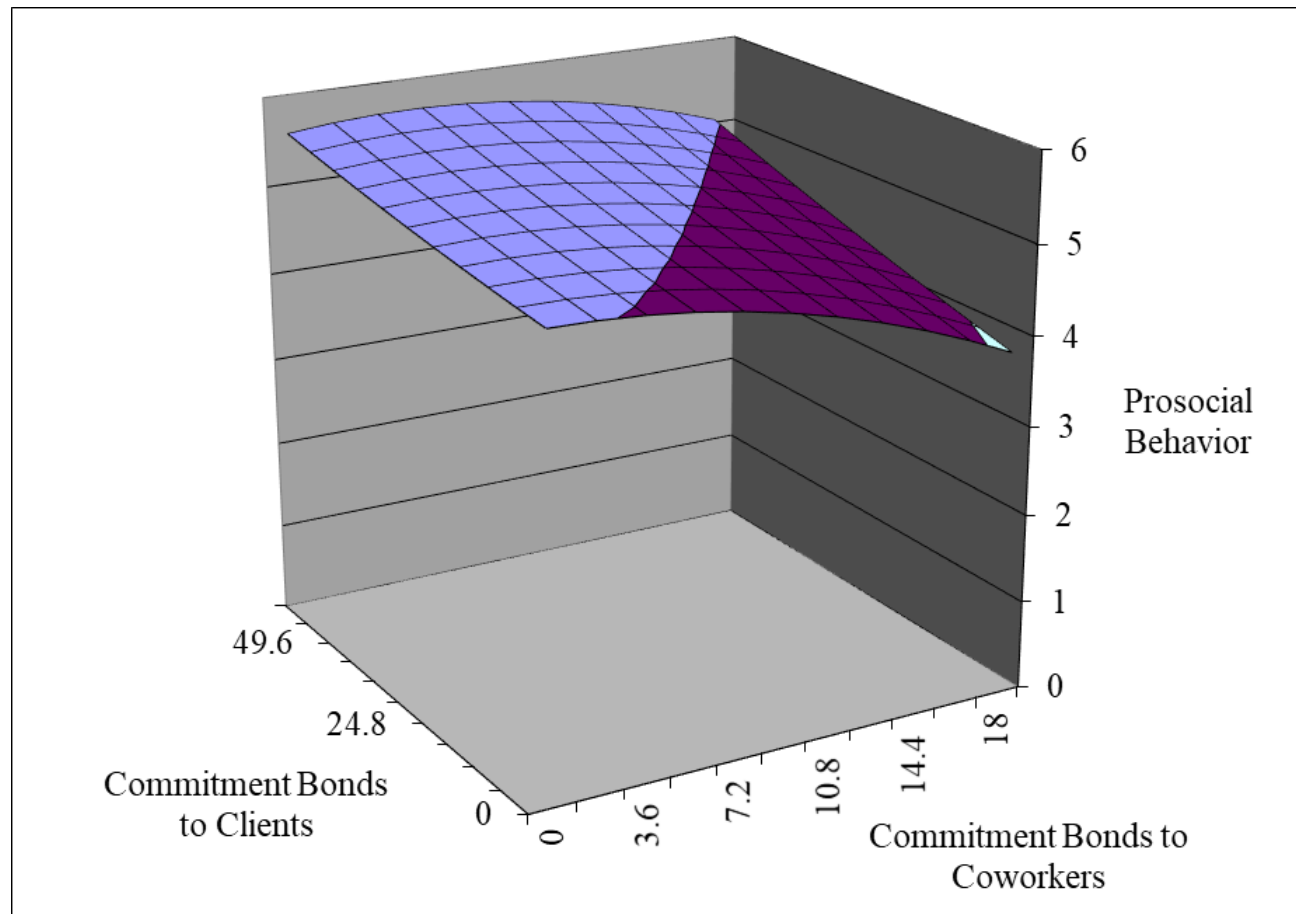


FIGURE 8: Congruence and Incongruence Effects of Strength of Commitment Bonds to Coworkers and Strength of Commitment Bonds to Clients on Retention

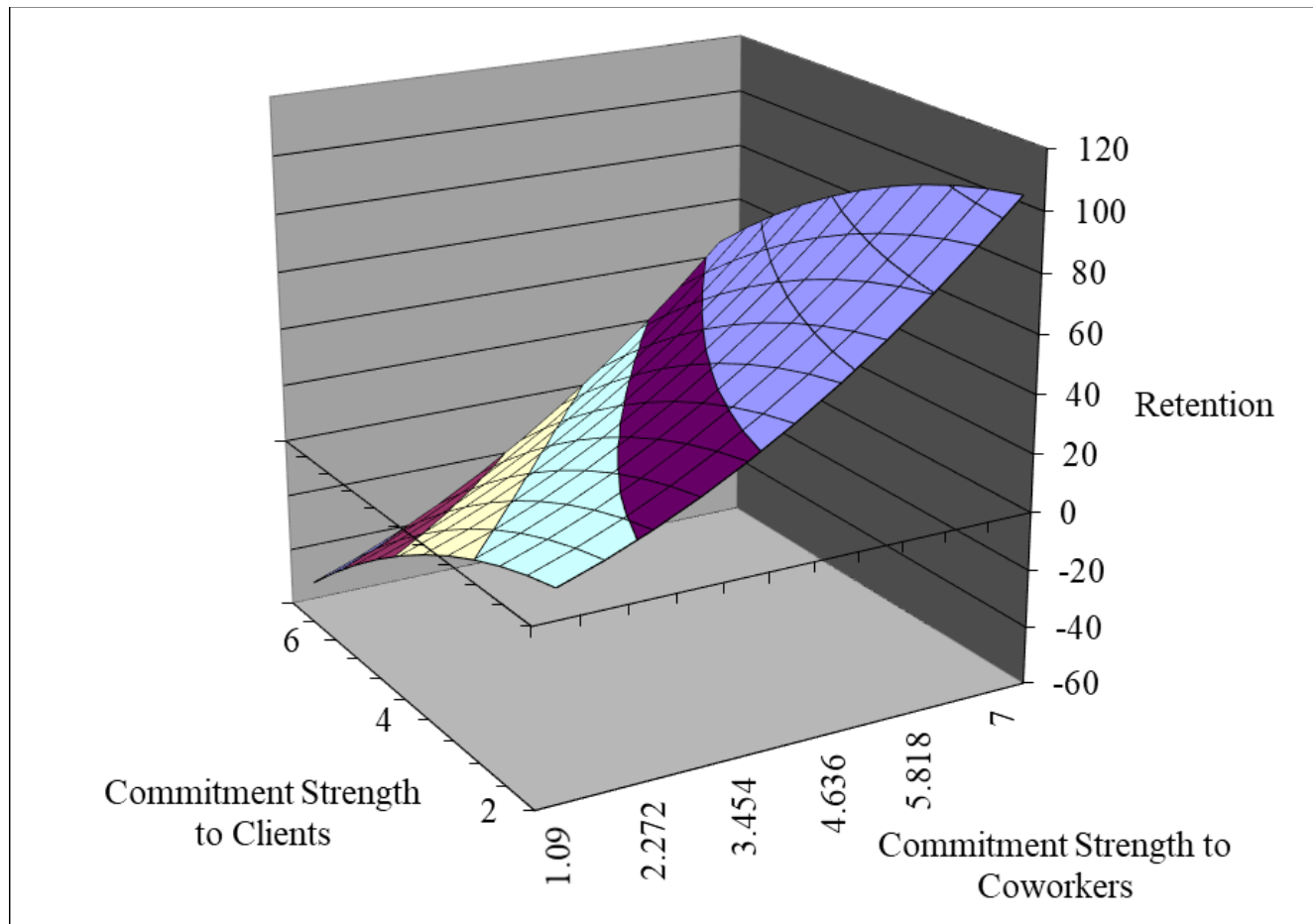


FIGURE 9: Congruence and Incongruence Effects of Strength of Commitment Bonds to Coworkers and Strength of Commitment Bonds to Clients on Intentions to Remain

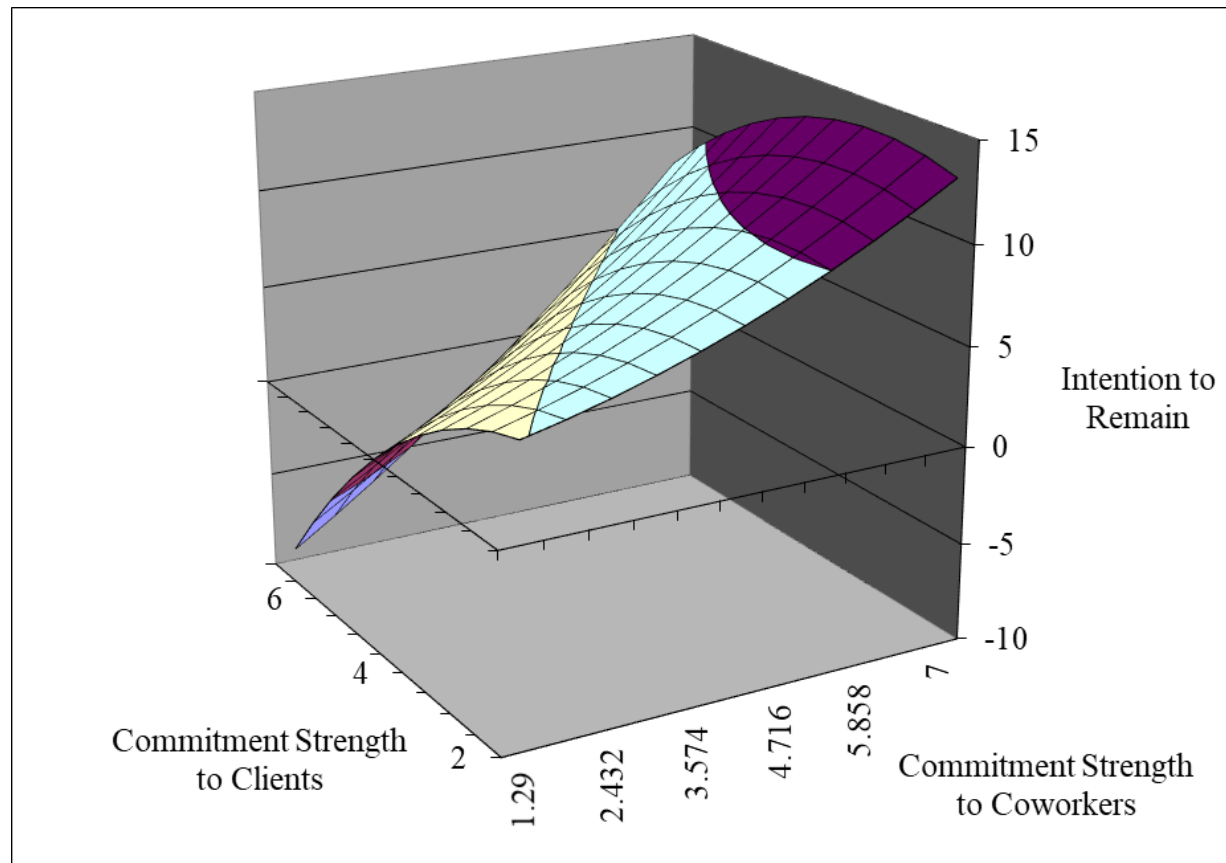


FIGURE 10: Congruence and Incongruence Effects of Strength of Commitment Bonds to Coworkers and Strength of Commitment Bonds to Clients on Job Performance

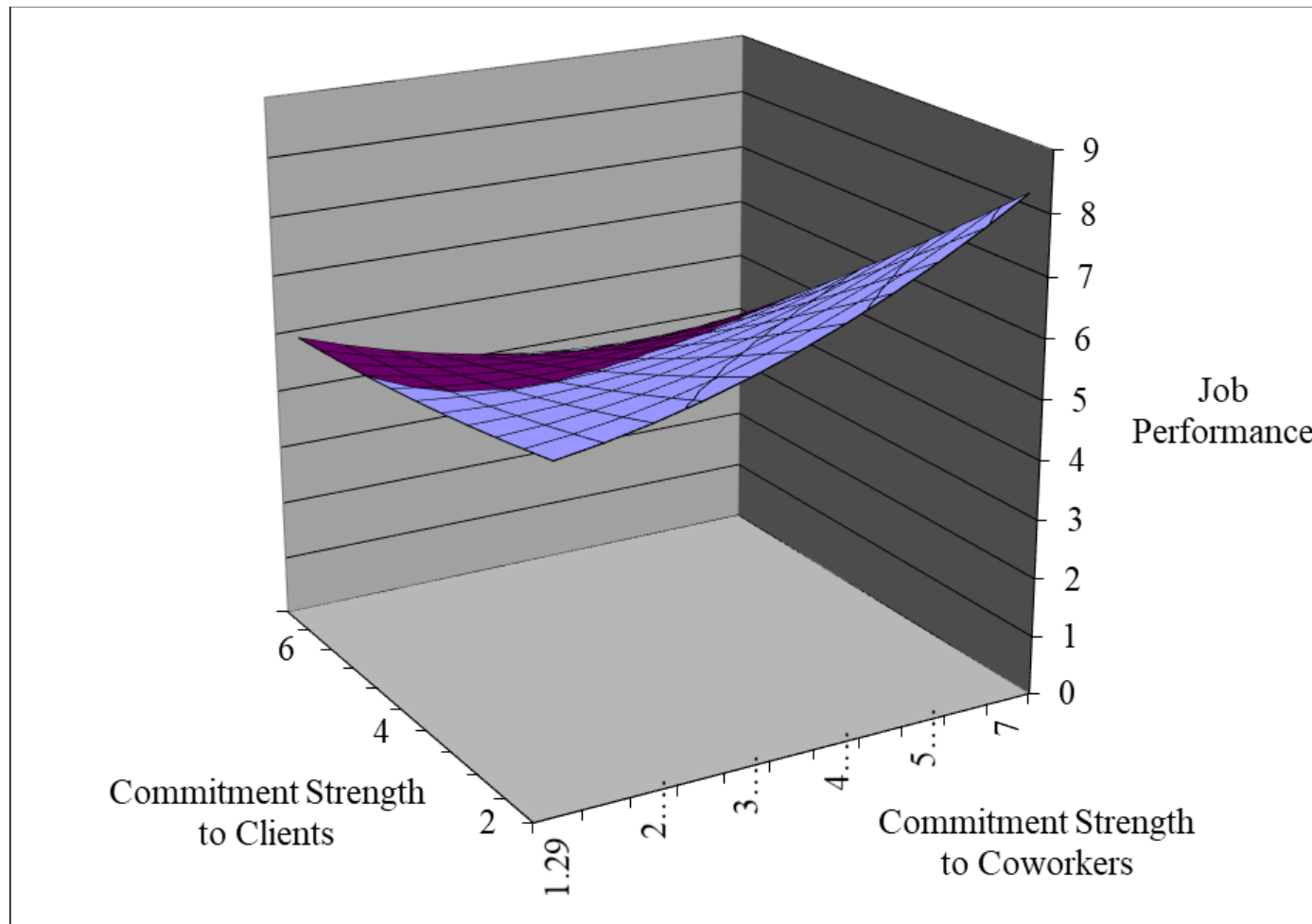


FIGURE 11: Congruence and Incongruence Effects of Strength of Commitment Bonds to Coworkers and Strength of Commitment Bonds to Clients on Prosocial Behaviors

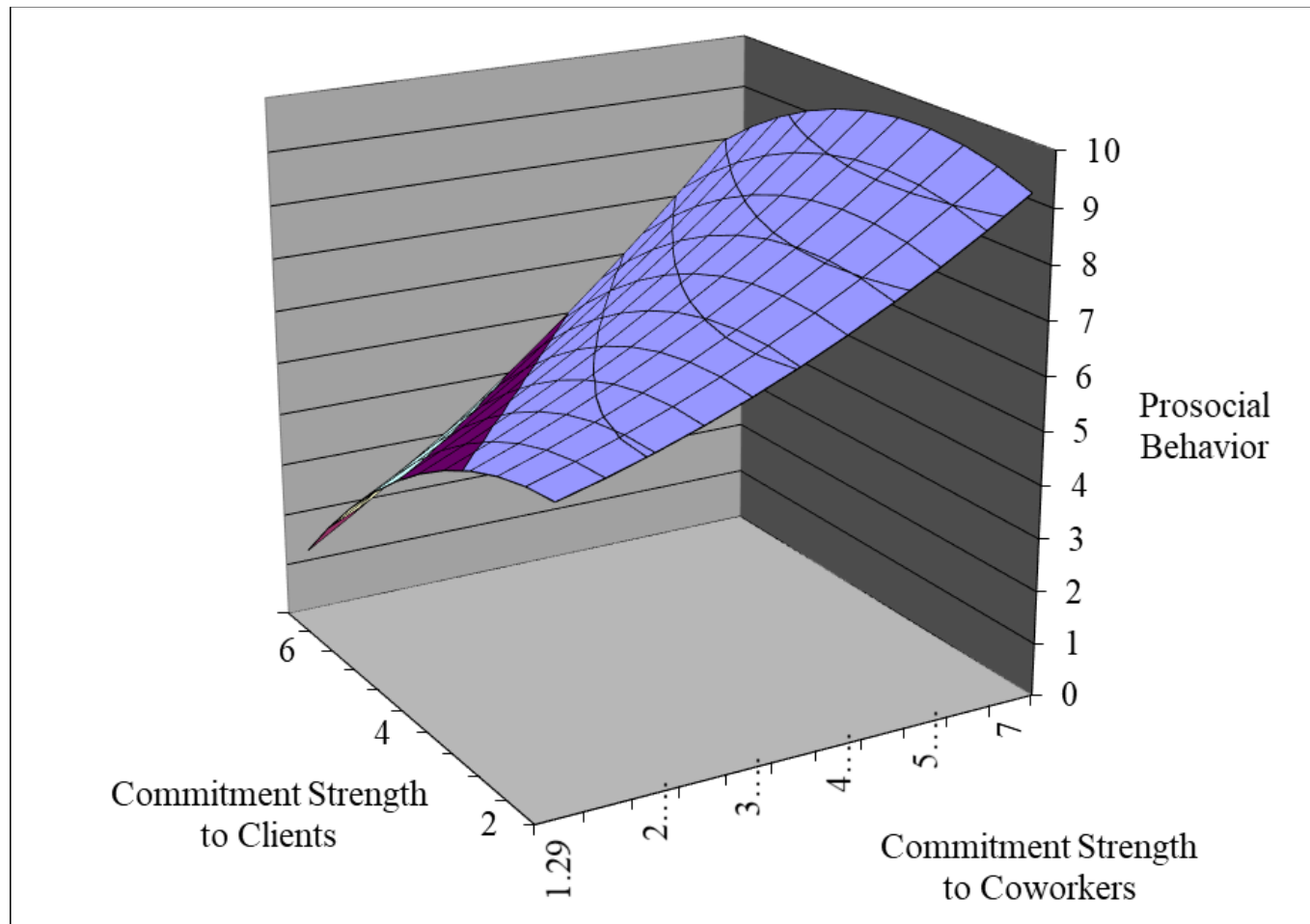


FIGURE 12: Congruence and Incongruence Effects of Group Commitment to Coworkers and Group Commitment to Clients on Turnover

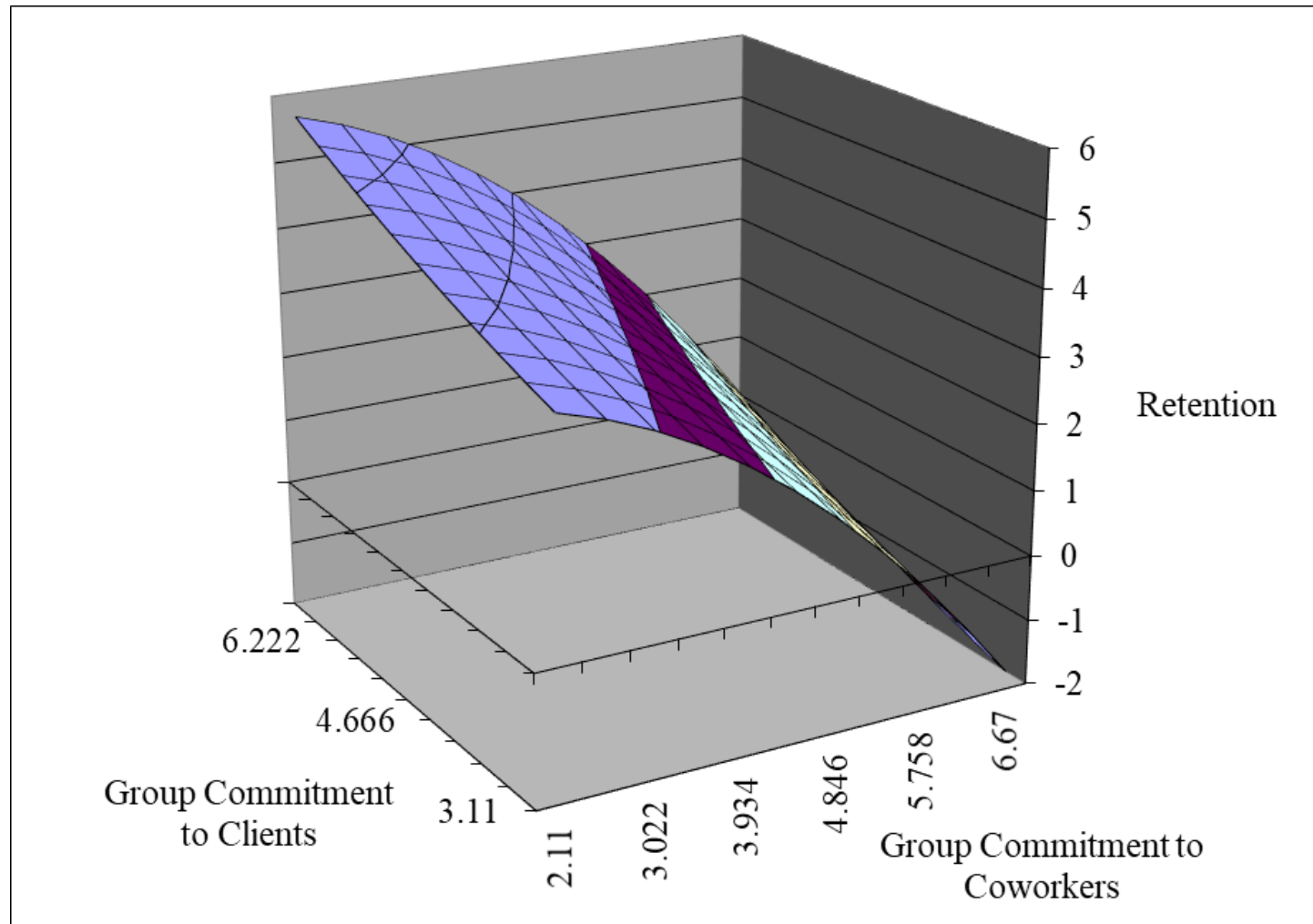


FIGURE 13: Congruence and Incongruence Effects of Group Commitment to Coworkers and Group Commitment to Clients on Intentions to Remain

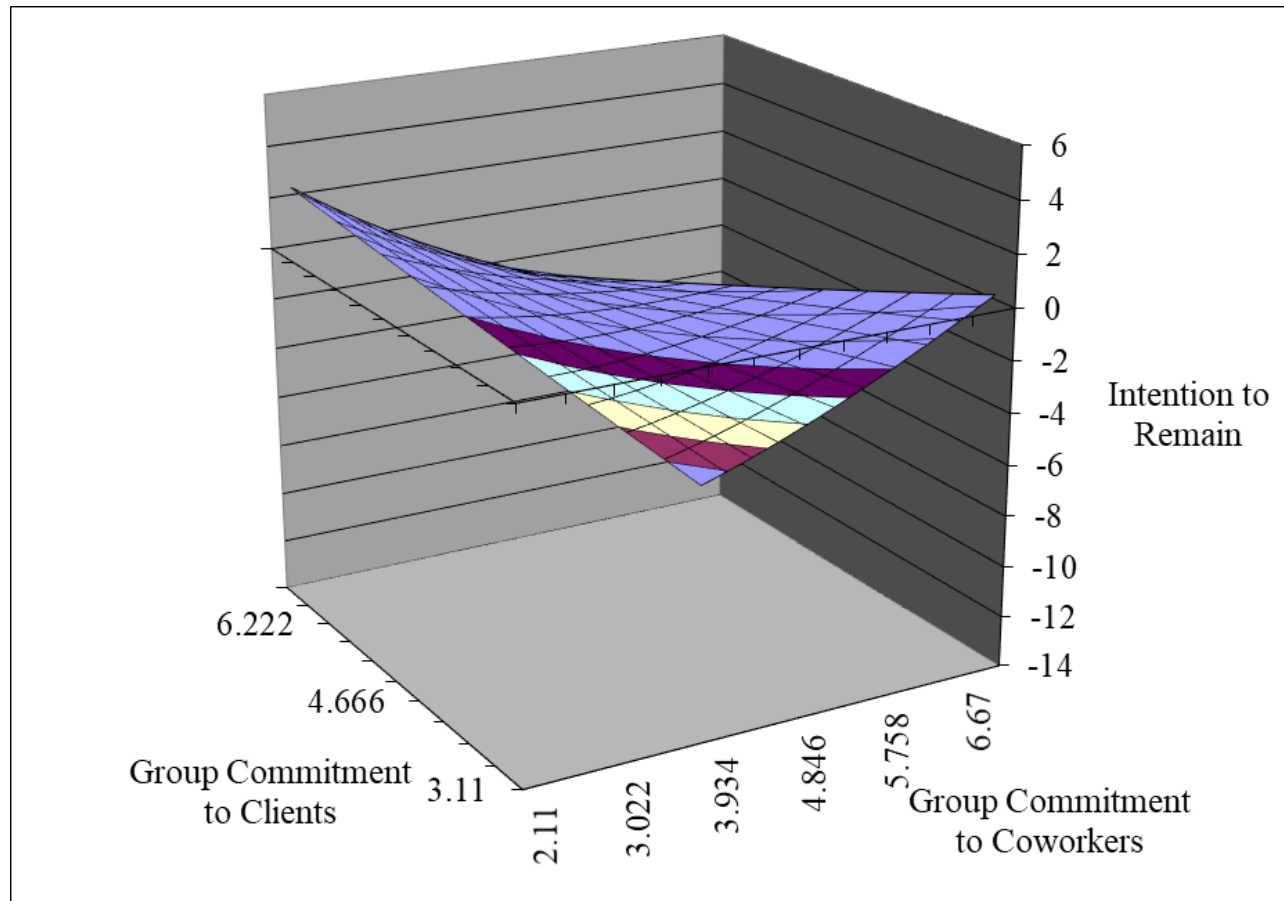


FIGURE 14: Congruence and Incongruence Effects of Group Commitment to Coworkers and Group Commitment to Clients on Job Performance

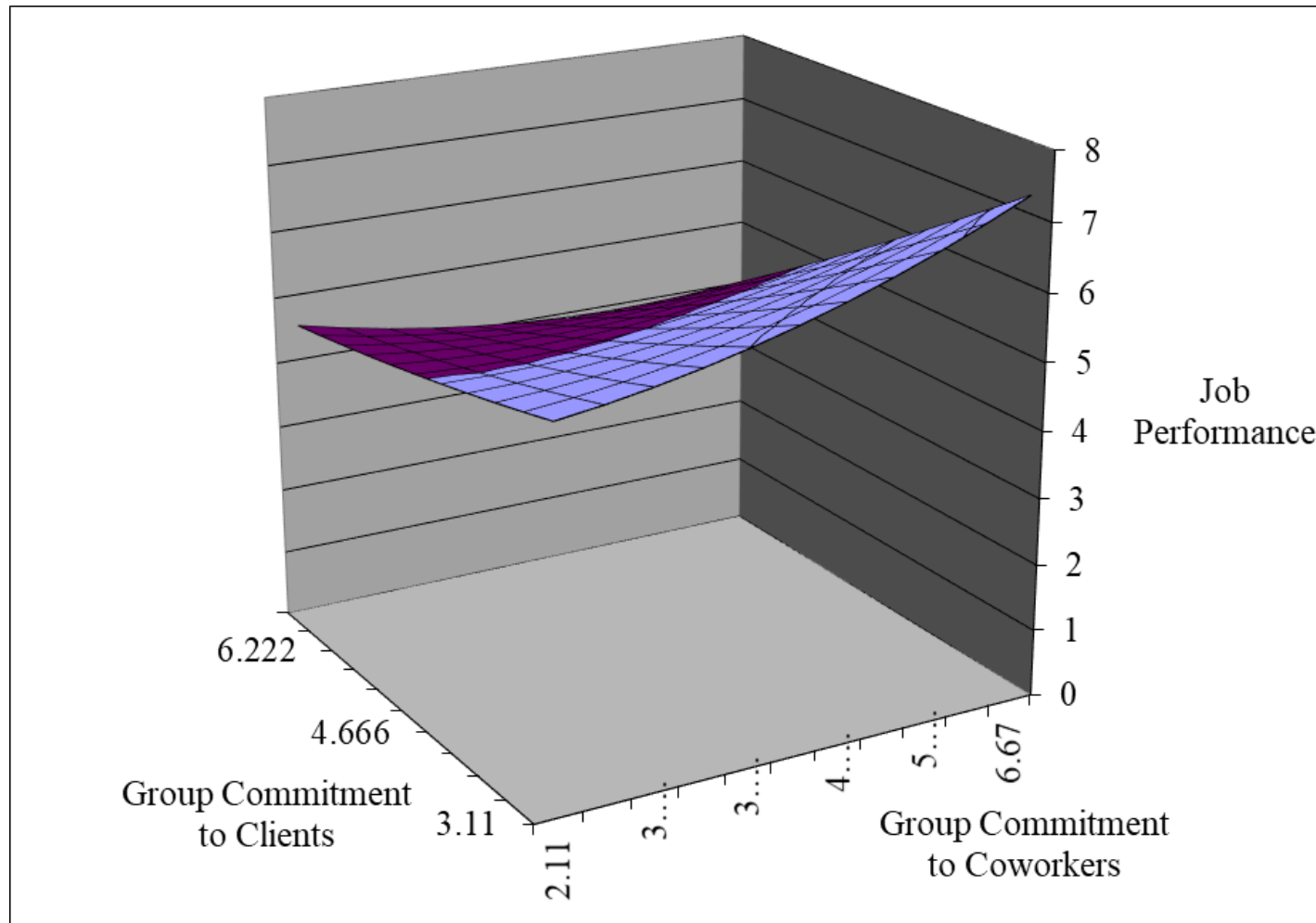


FIGURE 15: Congruence and Incongruence Effects of Group Commitment to Coworkers and Group Commitment to Clients on Prosocial Behaviors

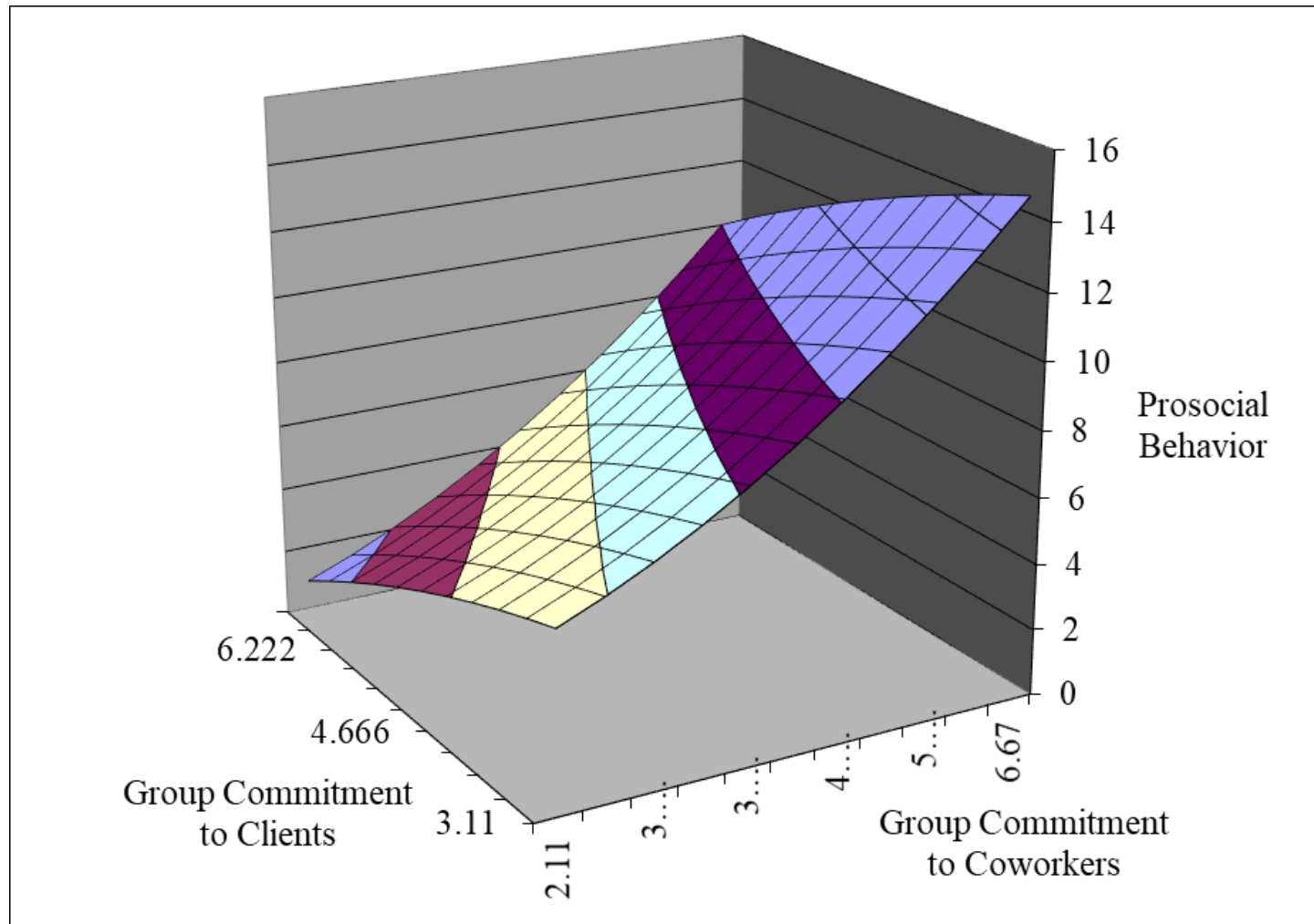


FIGURE 16: Cross-Level Moderating Effect of Commitment Strength to Clients on the Relationship Between Duration of Contact and Commitment Bond Formation to Coworkers

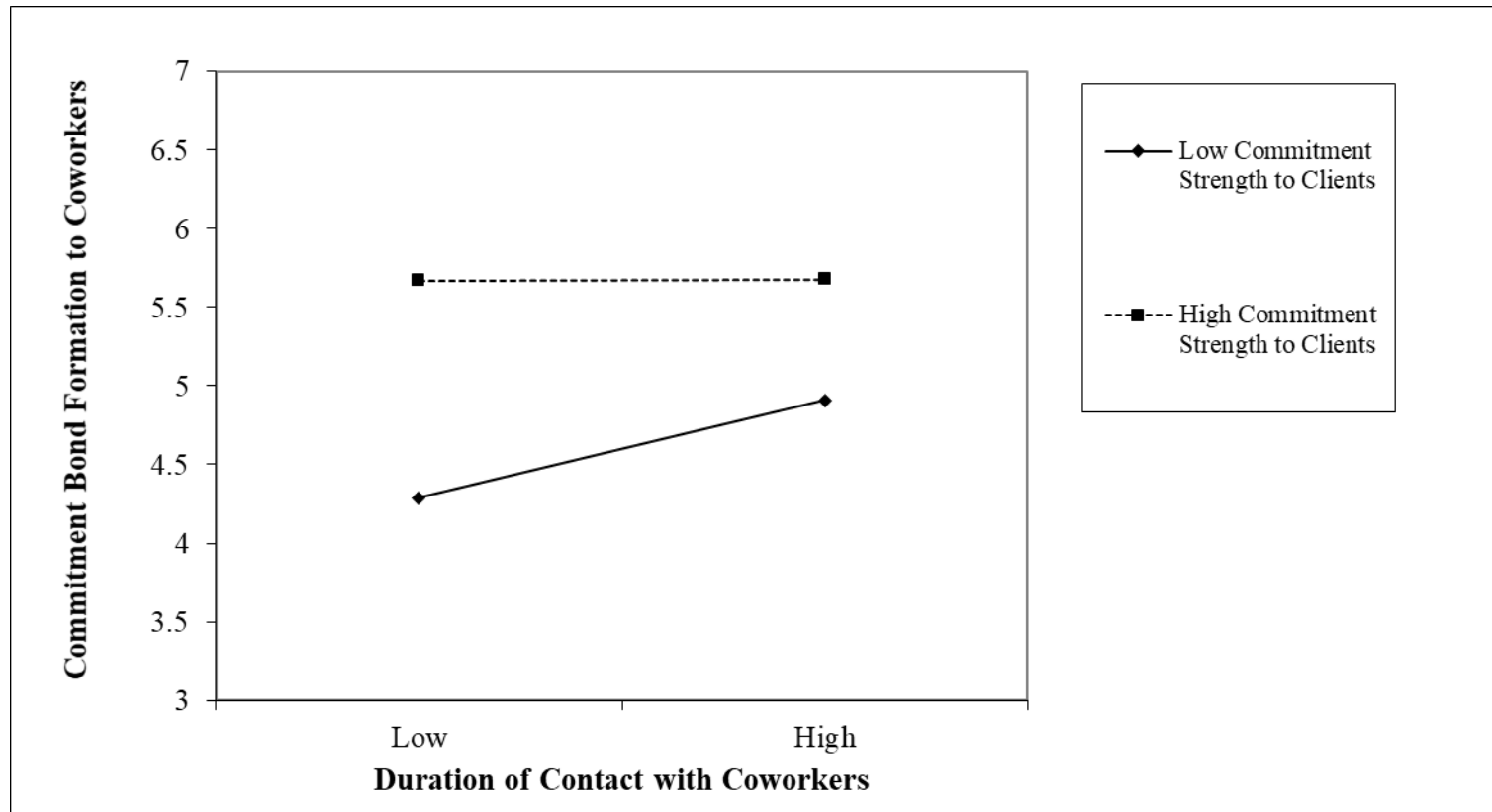
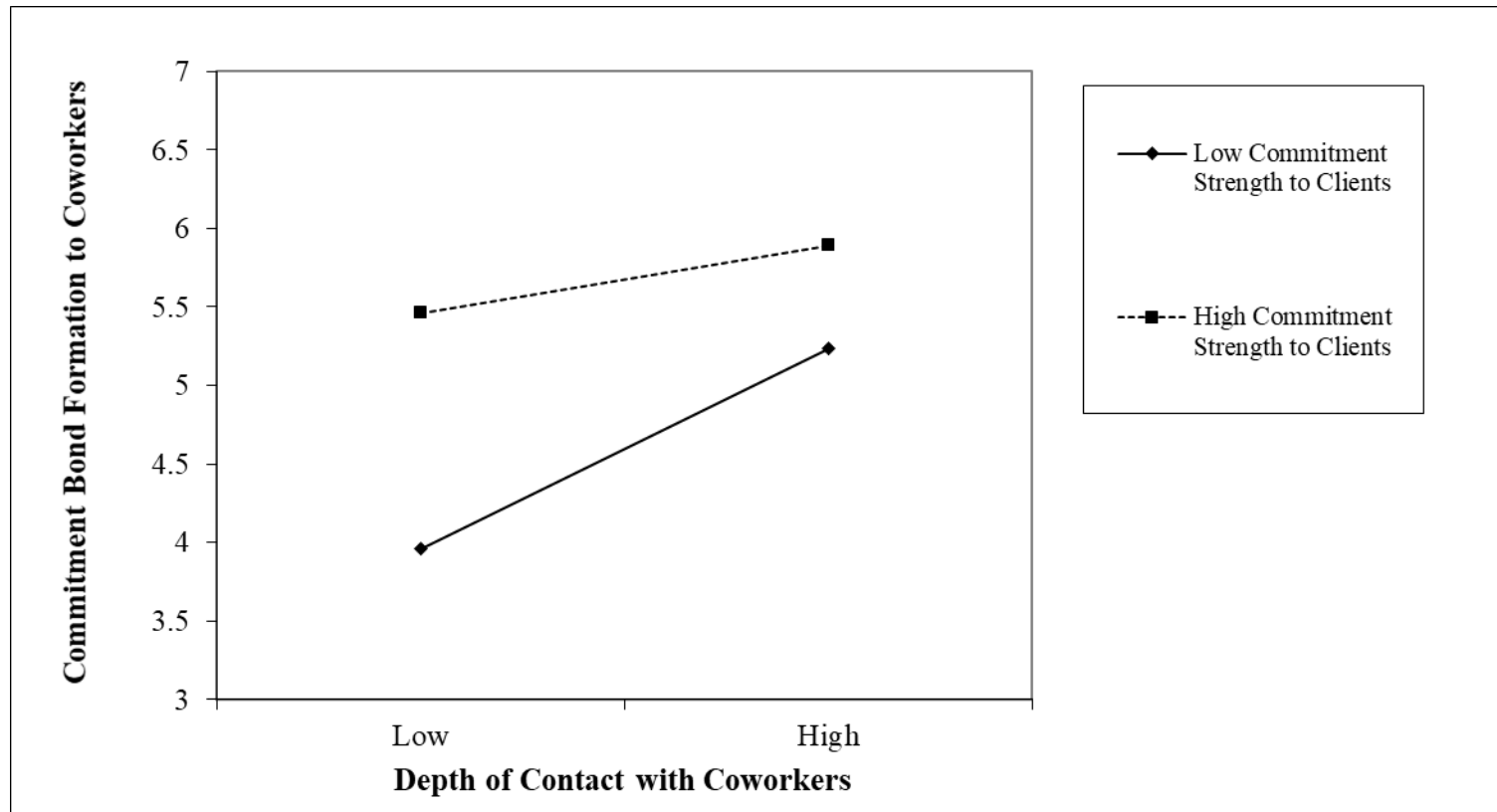


FIGURE 17: Cross-Level Moderating Effect of Commitment Strength to Clients on the Relationship Between Depth of Contact and Commitment Bond Formation to Coworkers



Appendix C—Participant Survey Measures

Personality (*1 = strongly disagree to 7 = strongly agree*)

Extraversion

1. I am the life of the party.
2. I feel comfortable around people.
3. I start conversations.
4. I talk to a lot of different people at parties.
5. I don't mind being the center of attention.

Conscientiousness

1. I am always prepared.
2. I pay attention to details.
3. I get chores done right away.
4. I carry out my plans.
5. I make plans and stick to them.

Openness

1. I believe in the importance of art.
2. I have a vivid imagination.
3. I carry the conversation to a higher level.
4. I enjoy hearing new ideas.
5. I tend to vote for liberal political candidates.

Neuroticism

1. I often feel blue.
2. I dislike myself.
3. I am often down in the dumps.
4. I have frequent mood swings.
5. I panic easily.

Agreeableness

1. I have a good word for everyone.
2. I believe that others have good intentions.
3. I respect others.
4. I accept people as they are.
5. I make people feel at ease.

Job Satisfaction (*1 = strongly disagree to 7 = strongly agree*)

1. All in all, I am satisfied with my job.
2. In general, I don't like my job.
3. In general, I like working here.

Overall Embeddedness (*1 = strongly disagree to 7 = strongly agree*)

1. I feel attached to this organization.
2. It would be too difficult for me to leave this organization.
3. I am tightly connected to this organization.

Job Characteristics Model (1 = very inaccurate to 7 = very accurate)

1. The job gives me a chance to use my personal initiative and judgment in carrying out the work
2. This job gives me considerable opportunity for independence and freedom in how I do the work.
3. The job is arranged so that I can do an entire piece of work from beginning to end.
4. The job provides me with the chance to completely finish the pieces of work I begin
5. The job requires me to use a number of complex or high-level skills
6. This job is quite simple and repetitive
7. The job itself is very significant and important in the broader scheme of things.
8. This job is one where a lot of other people can be affected by how well the work gets done
9. After I finish a job, I know whether I performed well.
10. Just doing the work required by the job provides many chances for me to figure out how well I am doing.

Contact with Beneficiaries

Contact Frequency (1 = once a month to 7 = daily)

1. How often do you have contact with _____?

Contact Depth (1 = not at all to 7 = to a very large extent)

1. On average, to what extent were your interactions with _____ personal, and not just work-related?

Contact Duration

1. On average, how long (in minutes) are your interactions with _____?

Evaluation of Contact (-3 = very negative to +3 = very positive)

1. On average, how would you rate the quality of your interactions with _____?

Commitment Bond Formation (0 = no, 1 = yes)

1. I voluntarily made the decision to commit to this individual.
2. I voluntarily made the decision to be dedicated to this individual.

Commitment Bond Strength (1 = not at all, 7 = completely)

1. How committed are you to this individual?
2. How dedicated are you to this individual?

Commitment Points (relative commitment)

Instructions: Imagine that someone gave you 100 points, and you must distribute the 100 points among everyone listed below to reflect how committed you are to each person. The more points you give someone, the more committed you are to him or her. Points can be distributed equally or unequally, but you can only allocate 100 points and all 100 points must be distributed. The total number of points will be tracked for you at the bottom of the page.

Burnout (1 = strongly disagree to 7 = strongly agree)

1. I feel burned out from my work.
2. I feel emotionally drained from my work.
3. I feel used up at the end of the workday.

Ease of Movement (1 = strongly disagree to 7 = strongly agree)

1. There simply aren't very many jobs for people like me in today's job market.
2. Given my qualifications and experience, getting a new job would not be very hard at all.
3. I can think of a number of organizations that would probably offer me a job if I was looking.

Absenteeism

1. In the last month, how many days was this employee absent from a scheduled work shift?

Tardiness

1. In the last month, how many times was this employee late to a scheduled work shift?

Group Commitment

Affective

1. My coworkers/residents have a great deal of personal meaning for me.
2. I do not feel a strong sense of "belonging" to my coworkers/residents.
3. I would be very happy to spend the rest of my career with my coworkers/residents.

Continuance

1. I feel I have too few options to consider leaving my coworkers/residents.
2. Too much of my life would be disrupted if I decided I wanted to leave my coworkers/residents now.
3. It would be very hard for me to leave my coworkers/residents right now, even if I wanted to.

Normative

1. I would not leave my coworkers/residents right now because I have a sense of obligation to them.
2. My coworkers/residents deserve my loyalty.
3. I owe a great deal to my coworkers/residents.

Prosocial Motivation (1 = strongly disagree to 7 = strongly agree)

Why are you motivated to do your work?

1. Because I care about benefitting others through my work.
2. Because I want to help others through my work.
3. Because I want to have positive impact on others.
4. Because it is important to me to do good for others through my work.

Intentions to Remain

1. Indicate the extent to which you agree with this statement: I intend to remain with the organization for the next 12 months? (1 = strongly disagree to 7 = strongly agree)
2. How strongly do you feel about remaining with the organization during the next 12 months? (1 = very weakly to 7 = very strongly)
3. How likely is it that you will remain the organization for the next 12 months? (1 = not at all likely to 7 = very likely)

Appendix D—Supervisor Survey Measures

Job Performance (*1 = strongly disagree to 7 = strongly agree*)

In the past month, on average, this individual...

1. Adequately completes assigned duties associated with care of residents
2. Fulfills responsibilities pertaining to care of residents specified in job description
3. Performs tasks associated with care of residents that are expected of him/her
4. Meets formal performance requirements pertaining to care of residents

Prosocial Behaviors (*1 = strongly disagree to 7 = strongly agree*)

In the past month, on average, this individual...

1. Assist residents with needs when not asked
2. Takes time to listen to residents' problems and worries
3. Takes a personal interest in residents
4. Passes along information to co-workers about resident care

Proactive Behaviors (*1 = strongly disagree to 7 = strongly agree*)

Directed to Clients

In the past month, on average, this individual...

1. goes out of way to help new residents
2. takes a personal interest in residents
3. takes time to listen to residents' problems and worries
4. helps fill in for an absent coworker

Directed to Coworkers and Organization

1. This particular employee assists coworkers with their work for the benefit of the organization
2. This particular employee gets involved to benefit this organization
3. This particular employee helps coworkers learn about the work

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