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When Being More Different and Less Visible Leads to Commitment and Justice for All

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WHEN BEING MORE DIFFERENT AND LESS VISIBLE LEADS TO
COMMITMENT AND JUSTICE FOR ALL

by

Lisa Farmer

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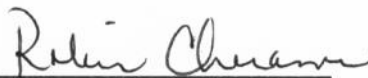**Dissertation Defense: April 20, 2015**

DBA Candidate: Lisa Farmer (Cohort 2, Management)

The content and format of the dissertation are appropriate and acceptable for the awarding of the degree of Doctor of Business Administration.

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To my remaining family and friends, thank you for your prayers.

DEDICATION

This dissertation is dedicated to my daughters, Jordan and Leyla. This journey

overlapped with some critical years in both of your lives but I pray that my presence and

love was felt when it was needed most. Thank you both for your unconditional love and

making me always feel like Mother of the Year. I love my Butter Bean Brown and my

Vanilla Bean … forever!

ABSTRACT

WHEN BEING MORE DIFFERENT AND LESS VISIBLE LEADS TO
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Little empirical research is available that counters the viewpoint that both demographically dissimilar individuals and telecommuters have low-levels of commitment, in addition to the role of procedural justice in this context. Using a multi-company sample of 201 respondents employed by U.S. firms each with more than 100 employees; the results indicate significant support for high-levels of demographic dissimilarity associated with low-levels of affective commitment towards one's organization. Contrary to the hypotheses, high-intensity telecommuting was found to be more strongly related to affective commitment, especially when procedural justice was high. Non-significant results were found for telecommuting intensity as a moderator of the negative relationship between perceived relational demography and affective commitment. Overall, these results indicate that the frequency of telecommuting does not minimize the negative effects of demographic dissimilarity on commitment; however, perceptions of fair processes to determine telecommuting are important.

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Chapter 1 – INTRODUCTION

1.1 Research Overview

This section begins with a succinct review of the research proposal. This includes a brief discussion on the importance of considering innovative ways to use telecommuting to mitigate the negative impact of demographic differences and to stem perceptions of injustice by non-telecommuters. In other words, this research presents the possibility that demographically dissimilar individuals and telecommuters, although considered to be less committed, may not always be less committed to their organizations. Next, the lack of current literature's ability to extend the benefits of telecommuting beyond simple employee, employer, and environmental factors are discussed and proposed as a research gap. Finally, this section concludes by reviewing the research questions, theoretical approach and research methodology, and expected research contributions.

1.2 Relevance

Extant literature has shown that the increasing diverse demographic workplace environment has produced an abundance of individuals with diverse opinions and orientations that must be managed successfully (Jehn et al., 1999), if organizations are to succeed in this fiercely competitive information age. As the working population in the United States becomes the most diverse in its history (Toossi, 2007), companies may want to consider creative approaches to cultivate a culture of inclusivity. One such

creative approach may be to understand the different needs of minority populations in a way that's beneficial to diverse groups of people, as well as the company, yet not polarizing to non-minority individuals. For example, a workplace option such as telecommuting has been shown to increase organizational commitment (Hunton & Norman, 2010) and minorities that engage in telecommuting may perceive the opportunity to telecommute as a way to play down their apparent physical differences. Furthermore, when telecommuting is available to others, not just minority individuals, organizational commitment increases from all individuals (Sels et al., 2004) which may aid in balancing fairness perceptions from non-telecommuters. For more than thirty years, there have been predictions that telecommuting or working from a remote location would become the most common form of work for American employees (Nilles et al., 1976; Scheid 2009; Lister, 2010; Diana, 2010). Several researchers have successfully paved the way to help us understand who telecommutes (Bailey & Kurland,2002), the job functions that are suitable for telecommuting (Fritz et al., 1998), and personality traits that yield the most favorable attitudes towards telecommuting (Clark, 2007). However, research is absent with respect to using telecommuting as a potential solution to mitigate the negative impact of demographic differences in the workplace and to lessen the potential for non-telecommuters to perceive an injustice.

As stated previously, telecommuting has been shown to increase organization commitment (Hunton & Norman, 2010) and may be notably positive for minorities that work outside of the traditional workplace. Research on diversity in the workplace has found that diversity, which is the degree that individuals differ from one another based on an entire group's composition, can weaken organizational commitment and also lead to

turnover (Harrison et al., 1998). For example, women and minorities exit corporate America more than any other groups of workers during early employment, thus hindering progression towards a more diversified workforce (Hom et al., 2008). However, diversity is vital to businesses and offers businesses a competitive advantage in the global marketplace. Therefore, it is important to understand how demographic differences impact workplace attitudes and the solutions that can be implemented to reduce workplace negativity (i.e., a perpetual, disruptive attitude or behavior held by employees in a work setting regarding several work-related topics such as opportunities for promotions, decisions made by leadership, change in the organization, and lack of resources). Companies that implement the right approach for different people may be able to "distinguish between outcomes of fear, anxiety and desperation; [in favor of] outcomes of assertiveness, fairness and hope" (Baruch, 2004, p. 252). These outcomes may lead to either retaliatory behaviors or increased levels of sensitivity for differences in others and as such are important to this study. Specifically for the negative outcomes (i.e., fear, anxiety, and desperation), companies may be able to detect these negative outcomes by closely watching indicators such as increases in turnover or increases in medical claim filings related to stress. With an increasingly diverse workforce it becomes paramount that organizations have proven workplace solutions that can be easily and *fairly* implemented for the benefit of both telecommuters and non-telecommuters as non-telecommuters may develop perceptions of unfair treatment when others telecommute (Thatcher & Bagger, 2011). Therefore, the primary goal of the current research is to show that telecommuting can have positive effects for individuals who perceive themselves to be demographically dissimilar (i.e., physically different on factors such as race, gender,

and age) from others in their work unit. Additionally, the current study also proposes that there may be an opportunity to minimize backlash and retaliation from non-telecommuting coworkers in the right justice climate - ultimately leading to more committed employees.

1.3 Research Gaps

The concept of relational demography (i.e., the degree of demographic dissimilarity within the same work unit) is a way to operationalize diversity from an individual's perspective. Moreover, perceptions of relational demography have been sparingly studied and the results of these limited studies have produced mixed results for outcomes such as affective commitment. Additionally, telecommuting intensity (i.e., the degree or frequency of telecommuting) has been weakly represented in the literature as it relates to perceptions of dissimilarity, fairness perceptions, and commitment to the organization. With the exception of a few studies that analyze the moderating effect of telecommuting (Fritz et al., 1998; Igbaria & Guimaraes, 1999) on other main effect relationships such as the relationship between job role stressors (i.e., role ambiguity and role conflict) and overall job satisfaction, researchers have not empirically examined the interaction effect of telecommuting intensity on the negative relationship between perceived relational demography and affective commitment from the viewpoints of both the telecommuting and non-telecommuting coworkers. Consequently, peer reviewed research that proposes telecommuting as a strategy to mitigate the negative effects of perceived dissimilarities and potential perceptions of unfairness by non-telecommuting coworkers are nonexistent in the current literature. Therefore, the questions that we seek to answer in the present study are the following:

RQ1: How does telecommuting intensity positively impact the negative relationship between visible demographic dissimilarity and employee affective organizational commitment?

RQ2: How do perceptions of fairness about telecommuting choices impact the relationship between the degree of telecommuting and employee affective organizational commitment?

In other words, the goal of this current research is to show that two groups of individuals (i.e., demographically dissimilar individuals and telecommuters) can display high-levels of organizational commitment even though they have consistently been identified as having less commitment than others in the workplace.

1.4 Theoretical Approach and Methodology

The current research uses several theories to support the proposed hypotheses. The negative relationship between perceived relational demography and affective commitment is explained through the popular use of similarity-attraction (Byrne, 1971), social identity (Tajfel & Turner, 1986), and self-categorization (Turner, 1987) theories. The notion is that individuals will first identify characteristics about themselves and then categorize their similarities against others based on their social environment. Furthermore, any observed differences may lead to less interpersonal attraction to others in the workplace thereby generating less emotional commitment to the organization. However, the degree of telecommuting is likely to mitigate perceptions of dissimilarity as explained by psychological contracts theory (Rousseau, 1989). The idea is that telecommuting is seen as an unwritten contract of trust between the employee and their organization and telecommuters will likely view the opportunity to telecommute as a

caring gesture by the employer. As a result, the allowance of telecommuting, especially for demographically different employees, may lessen the effects of being different at the appropriate frequency of telecommuting. As such, telecommuting can weaken the negative relationship between perceived relational demography and affective commitment for low-intensity telecommuters more so than high-intensity or non-telecommuters. In addition, telecommuting is proposed to mitigate perceptions of injustice from non-telecommuting coworkers through the use of equity theory (Adams, 1965) and procedural justice theory (Leventhal, 1980). The thought is that the positive relationship between telecommuting intensity and affective commitment will be stronger for both telecommuters and non-telecommuters as long as all workers have the option (i.e., a voice in the process) to telecommute. This study examines moderation in the form of differential validity where direct relationships are strengthened or weakened by the moderating variables (Baron & Kenny, 1986). Refer to the conceptual model shown below in Figure 1.
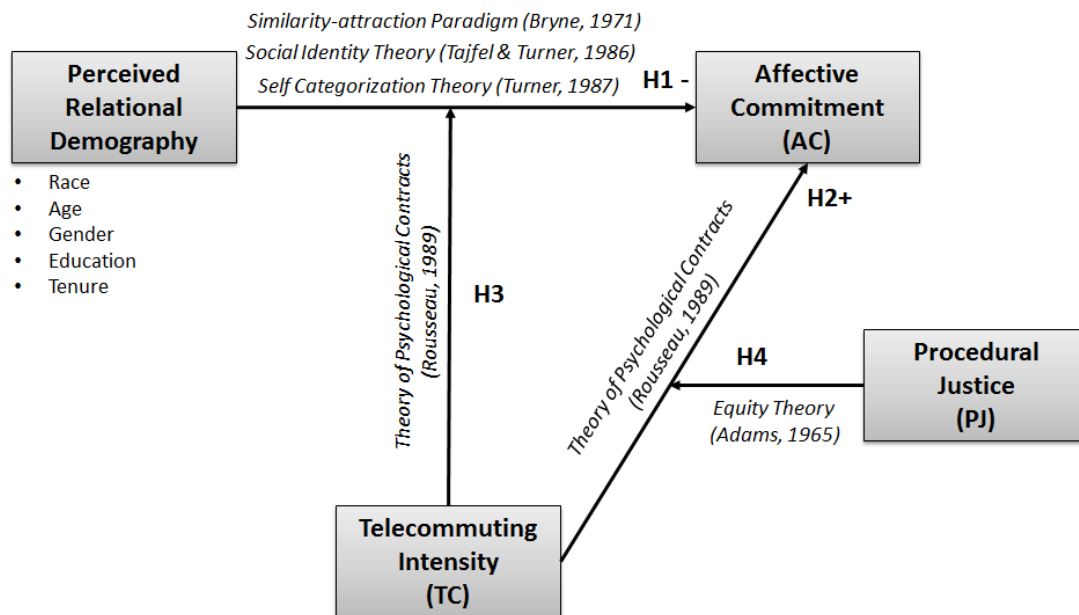
Figure 1. Conceptual Model

1.5 Research Contributions

   This research contributes to four bodies of distinct literature – diversity, relational

demography, organizational commitment, and telecommuting. First, early research

largely implied that relational demography has the same effects regardless of the context.

In general, it was accepted that negative effects such as isolation and tokenism affected

all individuals within diverse populations in the same manner and under the same

conditions. However, examining context-specific moderators as it relates to relational

demography is a contribution to the diversity literature (Lawrence, 1997; Van

Knippenberg & Schippers, 2007) and will build a foundation towards a deeper

understanding of the true nature and magnitude of relational demography effects (David

et al., 2010), as contextual factors associated with diversity have received little research

attention (Johns, 2006) in telecommuting literature. Next, telecommuting researchers

have typically analyzed perspectives of the telecommuter, the supervisor, the

organization, or society as a whole. However, a lack of research exists that compares the

attitudes of telecommuters and non-telecommuters (Walls et al., 2007; Thatcher &

Bagger, 2007). The opportunity to empirically explore workplace attitudes from non-

telecommuting workers is a contribution to the telecommuting literature and is an

important viewpoint to consider (Brown, 2010; Thatcher & Bagger, 2011) with strong

practical implications. Furthermore, limited studies (e.g., Kurland & Egan, 1999;

Hakonen & Lipponen, 2008; Thatcher & Bagger, 2011) exist on fairness in the context of

telecommuting (for both telecommuters and non-telecommuters) and research on

telecommuting and procedural justice represents a ripe area for future research (Siegel et

al., 2005). Finally, empirical research that counters the viewpoint that telecommuters and

demographically different individuals have low-levels of commitment is a contribution to

the commitment literature as individual-level outcomes may be dependent on the frequency of telecommuting which impacts the entire organization (Bailey & Kurland, 2002). Overall, understanding a new role of workplace flexibility, such as telecommuting, to minimize the negative effects of demographic dissimilarity and perceptions of fairness is an interesting and important research area but, to date, little empirical work has been done.

Chapter 2 – LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Overview

The subsequent sections provide an outline of the groundwork required to support

the four hypothesized relationships shown in the conceptual model. First, each section

begins with an overview of the construct or variable (e.g., perceived relational

demography, affective commitment, telecommuting intensity, and procedural justice)

which includes definitions and common references. Next, relevant literature on the focal

topic is set forth and each section concludes with a discussion of associated theories that

support the proposed hypotheses. Finally, a summary of the methods, results, findings,

limitations, and conclusions will follow in subsequent chapters.

2.2 Perceived Relational Demography Overview

The main focus of this section is to outline the literature as it relates to perceived

relational demography. First, the concepts of diversity and relational demography are

defined and compared, followed by an overview of the construct perceived relational

demography. Next, relevant literature on both actual relational demography and

perceived relational demography are reviewed. Finally, relevant theories explaining

perceived relational demography are set forth.

2.2.1 Diversity

  Diversity is a broad term that is defined at the group level and diversity is
typically used to refer to dimensions of demographic differences that are visible (i.e.,
readily identifiable or surface-level traits) such as race, gender, and age. However, other
dimensions of non-visible (i.e., less discernible or deep-level traits) differences may
include but are not limited to education, disability, national origin, and sexual orientation
(Harvey & Allard, 2005; Shore et al., 2009; Van Knippenberg & Schippers, 2007; and
Harrison, Price, & Bell, 1998). Diversity is often defined as the degree to which
individuals differ from one another based on the entire composition of a referent group
(Jackson, 1992; Triandis et al. 1994; Williams & O'Reilly, 1998; Van Knippenberg &
Schippers, 2007) but individual dissimilarity does not equate to group diversity (Van
Knippenberg & Schippers, 2007). For example, in 2012 less than 4 percent (18 out of
500) of Fortune 500 companies in the US were managed by a woman which does not
equate to diversity with respect to an equivalent number of women versus men at the
helm of these organizations (Bosker, 2012). Diversity is attribute specific with respect to
features or attributes of a group (Harrison & Klein, 2007) as a whole. Group diversity is
an "aggregate team-level construct that represents differences …" (Joshi & Roh, 2009, p.
600) between workers within the same team based on specific attributes (e.g., gender,
race, or age) but the focal point is still the composition or proportion of demographic
differences within the group and not the individual differences (Mannix & Neale, 2005;
Harrison & Klein, 2007). For example, a group is considered gender diverse when
representation of both females and males exists regardless of the ratio of females to males
or vice versa. Consequently, a group or team could be considered diverse even with just
30 percent female or male representation. In the end, the concept of diversity does not

address compositional imbalances (e.g., 30 percent females compared to 70 percent males) and therefore may neglect to expose deeper level variances in individual attitudes. Therefore, "sometimes diversity may be more a dichotomy (present versus absent) than a matter of degree" (Van Knippenberg & Schippers, 2007, p. 522) and furthermore, diversity offers little value to understanding shifts in individual attitudes based on the work unit as a whole.

The evolution of diversity in the workplace is important to understand as technological advances have driven the need for more interaction between individuals with different demographic characteristics, backgrounds, and cultures. The rapid occurrence of diversity in the workplace can be attributed to four major shifts in the US workforce as outlined in Workforce 2020 (Judy & D'Amico, 1997). First, barriers to workplace entry collapsed with the explosion of technological innovation (e.g., the Internet) and the creation of knowledge-based workers or those workers that use computer technology to create, manage, and disseminate information instead of using physical labor. Next, globalization (i.e., access to products, services, and processes that are unrestricted by geographical constraints) of markets created a world-wide competitive landscape (Levitt, 1984) leading to an abundance of lower-skilled jobs in the workforce. Workers with minimal education were now able to perform jobs in newly created environments such as global call centers and global manufacturing facilities. Next, a larger consumer segment has emerged as a result of Baby Boomers (i.e., persons born between years 1946 through 1964) working more years prior to and past the typical retirement age, thus requiring less physically demanding jobs in the service sector as opposed to the manufacturing sector. Finally, the growth of minority populations has

increased and could represent more than half of all new net entrants (i.e., new workers minus exiting workers) into the US workforce by the year 2020. Prior to 1995, new entrants into the civilian labor force in the US were primarily represented by white males who replaced other white males that were leaving the labor force due to age. Post-1995, women and minorities make up more of the new net entrants meaning that women and minority workers are replacing exiting white males at an ever increasing rate thus the US workforce has become increasingly diverse.

These enormous shifts in the workforce population have created the need for researchers to understand how diversity can be a benefit or detriment to workforce outcomes in organizations. The need to understand diversity in the workplace was pioneered and promoted by Peter Drucker (1960). Drucker's goal was to redesign Human Resource recruiting and selection practices to be more inclusive of a different generation that comprised more knowledge-based workers, more dual-income households, and ultimately more diverse work populations. Furthermore, understanding diversity is more vital to organizations now because demographic differences in the workplace can yield varying organizational experiences from very positive to very negative with respect to outcomes such as organizational performance and commitment (Harvey & Allard, 2005).

To begin with, the benefits of diversity can be far-reaching. It has been found that the benefits of diversity can lead to positive work outcomes such as increased productivity, innovation, and an easier path to conflict resolution (Cox & Smolinksi, 1994; Homan et al., 2008; Thatcher et al., 2003). Beyond main effects relationships, moderators such as task interdependence (i.e., reliance on coworkers to complete a task) and task type (i.e., the variety of a task) have also produced results emphasizing the

positive effects of diversity on work outcomes such as commitment. For example,

research by Jehn et al. (1999) showed that diverse team members were more committed

to their work unit when team members relied on one another (i.e., high interdependence).

This finding suggests that demographic diversity may be less salient in the presence of a

more significant purpose or moderator (Lawrence, 1997; Jackson & Joshi, 2004), as

determined collectively by the team members, such as reliance on others to complete

tasks. Diversity can also be an effective human resources strategy where the value of

integrating and effectively managing diversity in the workplace has been shown to

increase competitiveness and create a sustainable competitive advantage (Cox, 1991;

Wright et al., 1995; Richard & Johnson, 2001). Moreover, managing diversity in the

workplace is critical because it is thought to foster an atmosphere of respect for

differences leading to positive outcomes for the organization and its workers.

In contrast to the beneficial aspects of diversity, a myriad of research in

organizational behavior has shown results for negative outcomes of diversity. The

relationship between diversity and performance has shown that gender diversity (Tsui &

O'Reilly, 1989) and race diversity (Jackson & Joshi, 2003) can yield negative effects on

performance. Diversity has also been shown to decrease group cohesion, as well as

decrease satisfaction and commitment (Pfeifer, 1983) resulting in higher turnover.

Research by Jehn et al. (1999) showed that performance decreased as a result of

increased conflict within an unbalanced diverse work group (Jehn et al, 1999) suggesting

that compositional diversity matters. In another study, Joshi and Roh (2009) found that

in high-technology organizations, diversity (i.e., gender, race, and age) was more

significantly related to negative outcomes due to gender- and race-based status. For

example, data showed that white men in high-technology organizations had more access to resources such as training and mentoring than did women and minorities. The results may reflect the perception that less pressure exists in high-technology firms to establish diverse settings.

Given almost equivalent results in favor of both the benefits and detriments for the relationship between diversity and organizational outcomes, diversity researchers suggest that effects of workplace diversity should be explained through the lenses of situational settings (Jackson et al., 2003; Martins et al., 2003; Van Knippenberg & Schippers, 2007). Because main effects relationships between diversity and specific work outcomes have failed to account for contextual factors, the effects of diversity should be considered in the presence of moderating variables (Van Knippenberg & Schippers, 2007). Inclusion of context-specific moderators or mediators may help reduce variances in findings and provide more insight into the specific diversity variables that actually account for specific work outcomes in a given climate. Contextual factors are important (Martins et al., 2003) in explaining work group diversity outcomes such as organizational performance or commitment. For example, it is reasonable to believe that the workplace experiences of a sole female in a male-dominated work group may significantly differ based on the setting. If researchers only examine diversity then we would miss the experiences of the single individual. Would a female engineer that is part of a male-dominated virtual engineering team experience the same type and level of commitment to an organization as another female engineer that is part of a male-dominated in-office team? Extant literature (Tsui & O'Reilly, 1989; Tsui et al., 1992) would typically consider both female engineers to be less committed to the organization than their male

counterparts; however, consideration of the work setting (virtual versus in-office) may yield different attitudes about the females' continued commitment to the organization.

2.2.2 Definition of Relational Demography

Relational demography is defined as the degree of demographic similarity or dissimilarity between an individual and all other individuals within the same work unit (Tsui & O'Reilly, 1989). This current research views relational demography as the degree of demographic dissimilarity from the focal point of an individual compared to all other individuals in a group. Riordan (2000) described relational demography as the comparison by an individual of themselves and others within a work unit with respect to demographic differences. The concept of relational demography relies on a process of comparing one's own demographic characteristics to others with the acceptance of specific group characteristics as valid measures. An individual's judgment of demographic differences can only occur when the individual considers the demographics of all others in a specific referent group (Riordan, 2000). The difference between diversity and relational demography is that diversity is often examined at the group-level (i.e., the entire demographic composition of the group) while relational demography is defined from the viewpoint of individuals and how they differ from others in their group (Van Knippenberg & Schippers, 2007). Understanding relational demography provides important information as to how demographic differences in the workplace impact individual employees enabling predictions towards common attitudes and behaviors (Riordan, 1997).

Relational demography as a term began to appear in the academic literature in the late 1980s and has been examined by several scholars (e.g., Tsui & O'Reilly, 1989; Tsui

et al., 1992; Riordan & Shore, 1997; Harrison et al., 1998; Clark, 2001; Clark et al., 2002; David et al., 2010). Relational demography was originally conceived to refer to demographic dissimilarities between superior-subordinate dyads (Tsui & O'Reilly, 1989). The underlying principle of relational demography is that demographic differences have a negative impact on work-based outcomes such as work unit performance (Harrison et al., 1998) and commitment (Tsui et al., 1992). This is thought to be the case, primarily due to the principle of similarity-attraction (Byrne, 1971) which posits that similar visible, demographic characteristics such as race, age, and gender have a positive relationship with perceived similarity. Relational demography is also considered a theory (Mowday & Sutton, 1993; Riordan, 1997) that predicts how individual demographics interact within different social settings (Mowday & Sutton, 1993). The thought behind relational demography is that day-to-day experiences are driven by belonging to or *not* belonging to certain demographic groups.

Relational demography has also been used to describe differences beyond just physical, visible differences. Indeed, research has shown that even non-visible differences impact organization-related outcomes. Some researchers tend to expand the concept of relational demography to include constructs such as deep-level diversity (Harrison et al, 2002). Deep-level diversity examines differences among individuals within a work unit *over time* as it relates to certain psychological characteristics such as attitudes and personality. For example, Harrison et al. (2002) found that actual deep-level diversity (i.e., personality, values, attitudes, and beliefs) was positively related to perceived deep-level diversity. In other words, 'perception is reality' in that actual psychological traits align closely to perceptions of psychological characteristics but in

others. Furthermore, perceived deep-level diversity was negatively related to team social integration (i.e., cohesiveness, satisfaction with coworkers, positive social integration, and enjoyment of team experiences) and was even intensified when teams collaborated inferring that over time individuals found it more difficult to hide their attitudes and beliefs from their coworkers leading to a negative experience with team members.

In some cases, research has even shown that non-visible differences could lead to favorable organizational outcomes as opposed to visible differences which tend to be distorted by biases and stereotypes. Thatcher and Brown (2010) found that high-levels of informational differences, another deep level factor (e.g., educational background, current functional area of work, and tenure in company), leads to higher levels of individual creativity. A non-traditional example of non-visible diversity includes research examining individuals with low family responsibilities that are considered "carefree individuals" (Perry et al., 2013, p 7) versus high family responsibility individuals that are considered "busy individuals" (Perry et al., 2013, p7). It was found that individuals in the workplace that have more family responsibilities may psychologically disconnect from their team members with low family responsibilities because of a perceived lack of understanding by their co-workers who may have more free time to meet work-related deadlines (Perry et al., 2013). The current study focuses on the traditional definition of relational demography as defined by Tsui and O'Reilly (1989) where relational demography is the degree of demographic dissimilarity between an individual and all other individuals within the same work unit based on social-categorical, surface-level, relations-oriented, overt characteristics such as race, gender, and age.

Relational demography offers a deeper perspective on diversity but even so relational demography alone does not account for different reactions for similar groups of individuals. The context in which relational demography occurs is influential. For example, boundary conditions tend to diminish or enhance the effects of dissimilarity as was found in research that showed that under the dimension of job burnout (i.e., emotional exhaustion) being similar to one's supervisor did not enhance an individual's level of organizational commitment (David et al., 2010). In short, being around similar others would typically produce higher-levels of organization commitment, however job burnout is thought to be such a debilitating emotional and psychiatric condition that even being around similar others fails to bring about organizational commitment. At the same time, relational demography alone is considered context-oriented given the fact that individuals compare their demographic similarities to others in a specific or defined group (Riordan, 2000) (e.g., work group, social group, academic group, team sport, etc.) which may lead to different outcomes for similar types of individuals given the meaningfulness of the referent group.

Relational demography as a social comparison process occurs when an individual develops an innate human desire to understand where they fit amongst others in a group setting. A fit mismatch has been shown in certain situations to cause negative work-related attitudes and behaviors (Tsui & O'Reilly, 1989; Tsui et al., 1992; David et al., 2010). Social comparison theory (Festinger, 1954) posits that individuals have a need to self-evaluate and then compare themselves to others. The desire to fit takes shape as individuals make comparisons about their own demographic similarities against others. Person-environment fit is usually assessed by the focal person based on who they

consider to be 'the standard' or referent group. The norm is representative of the

demographic composition that is most accepted by external sources (i.e., stereotypes,

cultural biases, etc.). As a potential mechanism for self-protection, individuals compare

themselves against what they consider to be these externally-driven norms and may make

adjustments where possible to increase their fit. The truth is that the focal person owns

the process of personally accepting or not accepting these norms. Such acceptance could

vary based on the strength of the external forces. To summarize, the individual defines

the referent group, then the process of comparison occurs, and finally the decision of

whether the focal person is different from the group occurs.

2.2.3 Relevant Literature Review on Relational Demography

Relational demography has been studied from three main viewpoints – dyads

(e.g., supervisor to subordinate), main group (i.e., individual compared to others in the

same work unit), and cross-level (i.e., individual compared to others in the same work

unit based on the demographic composition of the entire work unit). Initially, scholars

concluded that an individuals' attitude and behavior could be explained by examining the

demographic differences or similarities between two individuals in the workplace. Tsui

and O'Reilly (1989) were the first to study relational demography using multiple

variables for superior-subordinate dyads. Up to this point, extant research typically used

only one or two demographic variables to study the direct effects of demographics

between two individuals as it related to individual-level work outcomes such as

performance or commitment.

2.2.3.1 Dyadic Viewpoint

Using six demographic variables – age, gender, race, education, company tenure,

and job tenure; Tsui and O'Reilly (1989) examined the effects of these demographic

variables on superiors' performance ratings and liking of their subordinates, as well as job ambiguity and role conflict as viewed by subordinates. It was argued that the social comparison process caused individuals to vary on multiple demographic characteristics instead of just one or two. Furthermore, it was found that differences in gender but not race led to supervisors' diminished liking of subordinates and lower performance ratings of subordinates (Tsui & O'Reilly, 1989). Further analyses of race indicated that white subordinates with black supervisors were liked more than black subordinates with white supervisors. Additionally, increased role ambiguity was experienced by subordinates with higher age and higher job tenure differences than their supervisors but this did not cause supervisors to give lower performance ratings (Tsui & O'Reilly, 1989) especially in cases where the supervisor had short job tenure. It is conceivable that the supervisor lacked clarity on the subordinates' role because the supervisor was still learning his/her role in the organization.

Use of the multivariate method explained more than double the variance than in previous studies and showed that individual work outcomes vary based on more than just simple demographics. Tsui and O'Reilly (1989) argued that a multivariate method would explain additional variances beyond the one or two variable method which ignored the effects of distribution of various demographic variables. For example, age is not the only demographic variable that accounts for increases or decreases in individual-level performance. Individual-level performance can also be impacted by gender differences. If a supervisor for a packaging company measures the performance for a male or female truck driver based on the number of packages unloaded where some packages weigh

more than 50 pounds, then in most instances being male and possibly younger may lead to better performance.

2.2.3.2 Main Group Viewpoint

Given the need to account for more variances than found using the dyad perspective, it eventually became necessary to expand the concept of relational demography to include differences between focal individuals compared to all other individuals in the same work unit. It was found that the greater the difference in race and gender of an individual as compared to all the other individuals in a work unit, then the less committed the focal individual was to the organization and the more likely that focal individual was to leave the organization (Tsui et al., 1992). To elaborate, being different in race and gender led to less informal communication giving way to feelings of isolation by the focal person that is most demographically different. Education and tenure have been found to be less salient demographic variables (Tsui et al., 1992) than race and gender possibly due to the inability to access these categories by looking at an individual.

2.3.3.3 Cross-Level Viewpoint

The literature then focused on differences between individuals in a work unit whereby differences could be more or less salient based on the entire composition of the group. The thought was that analyzing proportions could lead to different outcomes. Therefore, similar to the early work on the effects of proportions (Kanter, 1977), relational demography has also been studied as a "cross-level theory" (Riordan & Shore, 1997 p 342). Through the examination of over ninety eight work groups within a large insurance company Riordan and Shore (1997) found significant support for non-linear relationships for relational demography based on various compositional mixes (e.g., mostly white, 50% white-50% minority, and mostly minority). Overall, it was found that

the greater similarity between an individual and group composition on race, age, and tenure, than the greater was the individuals' commitment, work group productivity, and perceptions for advancement (Riordan & Shore, 1997). Race appeared to be the most significant factor as effects for differences in gender and tenure were not found for the attitudes studied. Upon further examination, African Americans reported negative attitudes with respect to work group commitment when they were in a group composed of mostly White individuals; however, African Americans had positive attitudes for work group productivity and advancement opportunities regardless of the groups' composition (Riordan & Shore, 1997). Having higher attitudes for work group productivity and advancement opportunities for dissimilarities in race for African Americans is contrary to the principle of relational demography. Conversely, White individuals showed positive attitudes for work group commitment, work group productivity and advancement opportunities as long as the composition of the group was mostly all White or as long as the group composition maintained a threshold (i.e., "threshold effect") (Riordan & Shore, 1997, p. 354) of between 40 – 60 percent White individuals, again the latter being counter to the original premise of relational demography. Finally, Hispanics showed negative attitudes most of the time unless the composition of the group was racially balanced (Riordan & Shore, 1997).

Analyzing the effects of relational demography as a cross-level theory offered a better understanding of the importance of the relative demographic traits of individuals that interact with groups based on various compositional situations; however, it offered little insight to context-based interactions. It is important to understand the chronological history of viewpoints used to explore various themes around relational demography as it

helps to explain the need for context-based analyses such as time (e.g., the first month versus month twelve) or location (e.g., telecommuting). In addition to the three main viewpoints on relational demography was the idea that demographic differences do interact differently based on the context, given that "it is the relative and not the absolute demographic characteristics that are predictive of individuals' work-related attitudes" (Riordan & Shore, 1997, p. 343). Context has been defined as the situational setting in a workplace that either minimizes or enhances workplace outcomes (Joshi & Roh, 2009). For example, longitudinal studies have found that surface-level demographics such as race, sex, and age become less important in the context of time because more accurate information can be used to derive opinions over longer periods of time (Harrison et al., 1998) as it becomes more difficult for individuals to disguise their true identity. A meta-analytic review by Joshi and Roh (2009) examined a contextual framework of moderators and found that relations-oriented diversity (i.e., race and gender) attributes have a significantly more negative impact on team performance based on specific settings. For example, in high-technology industries and in occupations dominated by white males, race and gender differences were found to negatively affect team performance demonstrating that context matters (Chattopadhyay et al., 2004; Joshi & Roh, 2009). Once more, context offers a deeper perspective on the effects of relational demography (David et al., 2010) and is a contribution to the diversity literature (Martins et al., 2003; Johns 2006; van Knippenberg & Schippers, 2007) which is examined in this study.

2.2.4 Definition of Perceived Relational Demography

       Although limited studies exist, a few scholars (Kirchmeyer, 1995; Riordan, 1997; Clark, 2001; Clark et al., 2002) have highlighted the need to conduct research that extends beyond the objective measures of relational demography to perceptions of

differences which may be more or less salient based on the individual perceiving the differences (Riordan, 2001). Perceived relational demography is the extent to which individuals perceive themselves to be similar to or different from other members in their work unit. Moreover, perceived relational demography reflects the degree or magnitude to which an individual believes, without confirmation, that they are similar to or different from others in their work unit. This current research views perceived relational demography as the degree to which an individual believes that they are different from others in their work unit. Perceived relational demography is a "direct measure of the relationship between a member and his or her group (according to his or her perspective)," (Clark et al., 2002, p. 9). In contrast, objective relational demography is an indirect measure based on generally accepted standards for a specific demographic category. For example, the concept of objective relational demography would generally place an American individual of both African and European ancestry in the race category of African-American or Black. On the other hand, that same individual may be perceived as Hispanic under the notion of perceived relational demography which may import visual cues that may not be factual. In general, perceptions are cognition-based assumptions that are shaped by the background and experiences of the focal person. Perceived relational demography underscores the actual theoretical premise of relational demography in that the viewpoint is based on the focal individuals' perceptions (Clark et al., 2002) and yet, individual differences in perceptions vary. Nevertheless, it is only the focal individuals' perspective that matters.

The four main approaches used to study relational demography are the D-score or distance score, interaction term, polynomial regression, or the perceptual method. The

perceptual approach is the least used measure of the four approaches. The D-score measures actual demographic similarity to a group by applying a formula for each specific demographic variable. One limitation of the D-score method is that it examines each demographic variable separately which may lead to incomplete conclusions. For example, being different in race but similar to others in age, tenure, and gender may lead to negative attitudes and behaviors instead of the intended positive outcomes especially should the individual ascribe importance to the category of race. The interaction approach focuses on the entire group composition and individuals are considered similar to others in their work unit if their demographic characteristic is close to the majority of others. For example, a 21-year old is considered similar in age to others in a group of predominantly 25-year old individuals (i.e., age and age composition) and studies have reported that relative similarity in age leads to organizational commitment (Tsui et al., 1992). However, using the interaction approach may limit our understanding of significant differences in assessing individual differences within a work unit based on the composition of the group. Polynomial Regression uses five predictors for each demographic characteristic and has been shown to account for more variance in outcomes related to performance and attitudes but has limited exposure given its complexity and inconsistent interpretations (Clark, 2001). In a more simplistic approach, the perceptual measure defines the referent group by asking how similar an individual perceives themselves to be to a specific group of people whereas other approaches of relational demography assumes that individuals make comparisons against the most relevant work group (Riordan, 2000). In all fairness, the perceptual approach may be limited by inconsistencies in an individual's measurement of perceived demographic dissimilarity to

others but conclusions drawn from perceptions can produce much stronger attitudes because individuals' may perceive threats or rewards to their social identity (Mullen, 1983).

It is important to study perceived relational demography as it offers many benefits over objective relational demography. First, perceived relational demography leverages a deeper understanding of diversity issues by accounting for additional variances through measuring individual perceptions (Clark et al., 2002).Using a direct measure such as perceived relational demography as opposed to an indirect measure of objective relational demography allows for greater specificity in identifying the root cause of attitudes and behaviors on work-related outcomes. Second, in a work context, perceived relational demography has been shown to be more closely related to attitudes such as organizational commitment (Riordan, 2001) which is being explored in greater detail in the present study. In fact, this study will help to expand Riordan's 2001 finding by extending perceived relational demography beyond its impact on organizational commitment by examining a specific dimension of organizational commitment (i.e., affective commitment) which will be discussed later in this study. Finally, perceptions may import a broader set of social considerations that may be relevant to shaping an individuals' perception of themselves and others thereby creating a potential springboard for easier future interactions with others who are noticeably and obviously different.

2.2.5 Relevant Literature on Perceived Relational Demography

Although perceptions can be more salient than objective reality (Clark et al., 2002), there have been only three peer reviewed, published studies (e.g., Kirchmeyer, 1995; Riordan, 1997, Clark et al., 2002) that examine the relationship between perceived

relational demography and organizational commitment. In general, there have been limited studies that highlight the importance of considering perceptions in relationship to diversity (e.g., Lawrence, 1997; Harrison et al., 2002; Avery et al, 2007; Cunningham, 2007; Maranto & Griffin, 2011). The perceptual framework posits that the perceptual visibility of dissimilar individuals is distorted because their visible demographics (i.e., age, race, and gender) (Jehn et al., 1997) stand out in a group of similar others making it easier to polarize and prevent assimilation of demographically dissimilar individuals (Kanter, 1977). Essentially, individual differences may tend to be more noticeable when surrounded by a group of similar others which may cause a stronger perception to be drawn about the differences.

To begin with, Kanter (1977) argued that perceptions of dissimilar minority individuals ("tokens") were made by similar majority individuals ("dominants") due to one of the three dimensions of the perceptual framework known as perceptual visibility distortions. However, Kirchmeyer (1995) was the first researcher to use a perceptual measure of relational demography. At the time, the technique examined demographic similarities and asked respondents to rate how similar they were to others in their work unit based on five characteristics – age, education, lifestyle, ethnic background, and religion (Kirchmeyer, 1995). In a longitudinal study, Kirchmeyer (1995) hypothesized that perceived relational demography for women and minorities would lead to lower organizational commitment (Mowday et al., 1982) but found no support for this notion after 3 months or 9 months on the job. The lack of support for this hypothesis could have possibly been due to effects of an economic recession whereby commitment was diminished as a result of the external financial environment. Additionally, the hypothesis

may not have received support due to the Canadian sample which was composed of minority Canadian employees who worked for Canadian employers that, at the time, were not mandated to diversify their workforce. On the other hand, Riordan (1997) hypothesized that the greater the perceived demographic similarity between an individual and the composition of the work-unit, the more positive would be the individual's organizational commitment. Based on race, gender, age, education, and company tenure, Riordan (1997) found positive support for perceived race and age similarity on organizational commitment. Contrary to Riordan's (1997) findings, Clark (2001) specifically studied affective organizational commitment as a positive outcome of perceived relational demography but did not find significant results for similarities in perceived age, race, gender, or tenure on affective organizational commitment. These mixed results offer an opportunity to further analyze perceived relational demography and its impact on affective organizational commitment.

Research (e.g., Kirchmeyer, 1995; Riordan, 1997, Clark et al., 2002) has shown that perceived relational demography is a valid measure and that the effects of relational demography rely greatly on perceptions. In reality, actual overt differences have been shown to be mediated by perceptions (Harrison et. al, 2002). Even more so than overt differences being related to perceived overt differences, research has also shown that perceived overt differences are related to deep-level differences such as personality, values, and attitudes and has even led to less satisfaction with coworkers and increased intentions to leave an organization (Cunningham, 2007). Furthermore, perceived differences, specifically in race, have been shown to be more difficult to accept for certain individuals not normally subjected to the role of being different (Cunningham,

2007). For example, White individuals report more negative organizational outcomes than other minorities when they are perceived (Cunningham, 2007) as and actually are different (Tsui et al., 1992) than others in their work unit.

In addition to endorsing perceived relational demography as a valid measure the literature also began to distinguish between readily observable demographic characteristics as opposed to less observable demographic characteristics as a way to bring about consistency when drawing conclusions. The thought was that less observable demographic characteristics such as education and tenure offered less accuracy when measured as a perception and therefore would further skew results. On the other hand, readily observable characteristics offered an argument in favor of perceptual measures in that the perceptions would be even more accurate than the actual observable differences. Research by Jehn et al. (1997) represented the first time in the literature that relational demography was segmented into two distinct groups - visible demographics such as age, race and sex; and informational demographics such as company tenure, work experience, and education. The idea was that visible demographics reacted more strongly with relationship conflict (i.e., disagreement among group members about personal issues) and informational demographics were more closely related to task conflict (i.e., disagreement among group members about a task being performed). It was found that differences in gender increased relationship conflict and differences in education increased task conflict (Jehn et al., 1997). Although relationship conflict and task conflict are based on perceptions, the findings support the importance of distinguishing the types of diversity as there are different challenges and implications associated with each. Although visible demographics may cause immediate negative reactions in those who have visible

differences (Cunningham, 2007) the counter argument is that visible demographics may yield strong reactions but perceptions of visible differences may produce even stronger reactions which could be positive *or* negative. The current study relies on perceptions of visible demographics because visible demographics are considered to be more readily identifiable and tend to shape perceptions more quickly than informational demographics.

2.2.6 Relevant Theories Supporting Perceived Relational Demography

Varied theoretical perspectives within the diversity literature have led to contradictory results (Harrison & Klein, 2007), but demography researchers have typically explained the effects of relational demography through the use of the similarity-attraction paradigm (Bryne, 1971), social identity theory (Tajfel & Turner, 1986), and self-categorization (Turner, 1987) theory. Bryne's (1971) similarity-attraction paradigm is the belief that individuals are most attracted to those they perceive themselves to be similar to on a number of attributes (Byrne, 1971). These perceived similarities tend to increase interpersonal attraction and are related to positive expectations of similar others (Byrne, 1971) with affective components playing an important role (Riordan, 1997). Moreover, affective components tend to create emotional attachment and commitment due to the perceptions of shared past experiences (Ashforth & Mael, 1989). This means that being similar evokes certain positive attitudes that foster trust and reciprocity (Perry et al., 2013) in support of positive social bonds. Being demographically similar to others has resulted in increased cohesion and attachment to coworkers (Maranto & Griffin, 2011) and smoother communication and easier predictability of behavior (Ibarra, 1992). Similarity-attraction paradigm proposes that humans have a natural desire to be in the company of individuals perceived to be demographically similar to them because it creates high-levels of interpersonal attraction which typically lead to frequent

communication about perceived shared experiences and a desire to maintain that affiliation (Tsui et al., 1992; Riordan, 2000; Cunningham, 2007). The basic assumption is that being dissimilar impacts the level of comfort individuals have with one another thereby limiting their level of integration and reducing their positive perceptions of one another. Byrne's (1971) similarity-attraction paradigm has been the cornerstone philosophy to help us understand the behavior and attitudes of similar individuals but several other theories have been shown to offer a more comprehensive explanation of the process of perceived relational demography.

Social identity and self-categorization theories (Tajfel & Turner, 1986) have been two of the most often used and popular theories to explain relational demography. Social identity theory is composed of two basic principles: 1) self-enhancement and 2) self-continuity (Riordan, 2000). Self-enhancement refers to an individual's need to maintain positive self-esteem while self-continuity is the notion that individuals prefer to maintain their identities for long periods of time independent of context. Furthermore, the thought is that individuals strive to constantly boost their self-image based on how they perceive themselves at a given point in time and how they would like for others to perceive them at that same time as well as at a time in the future. The motivation for self-identity is based on promoting one's own self-image in an attempt to avoid discrimination and to affirm affiliation as an in-group member (Avery, et al., 2007) where the in-group is the clique with which the individual identifies themselves with the most and the out-group is everyone else. Moreover, the in-group is positively valued because the focal person assigns a positive self-image to themselves and others in the in-group while the out-group is less valued (Chattopadhyay et al., 2004).

Social categorization theory evolved from social identity theory and is instrumental in explaining an individuals' "total identity" which is defined by two components – personal identity and social identity (Riordan, 2000 p 138). Personal identity is defined by non-visible (i.e., personality, values, etc.) characteristics while social identity is defined by visible characteristics (i.e., race, gender, age, etc.). The process of social categorization occurs when individuals decide which categories they fit and which categories others fit based on *perceptions*. The question of where do you fit and where do others fit is answered by the process of social categorization. Self-categorization refers to the process of classifying oneself based on socially defined and acceptable categories that typically have value associated to the category from the focal persons' perspective (Tajfel & Turner, 1986). Individuals typically *perceive* their category as a positive enhancer to their social identity which leads to a more favorable social category (Stewart, 2008). Social categorization is thought to occur because differences between work group members tends to produce a desire to classify people as either in-group (i.e., similar) or out-group (i.e., dissimilar) (Van Knippenberg & Schippers, 2007). When individuals constantly identify and categorize themselves they develop *perceptions* of being part of in-group members or out-group members (Tajfel & Turner, 1986). Both, social identity and self-categorization theories (Tajfel & Turner, 1986), have supported the idea that first people identify their own demographic attributes and then categorize their demographic attributes based on others around them that they want to be like and or similar to on some level (Tsui et al., 1992).

2.3 Affective Organizational Commitment Overview

The main focus of this section is to outline the literature as it relates to affective commitment. First, organizational commitment is defined. Next, an overview of all three

dimensions of organizational commitment is discussed with an emphasis on the dimension of affective commitment. Finally, relevant literature on affective commitment and related outcome variables are presented.

2.3.1 Definition of Affective Commitment

Organizational commitment is a construct that reflects a choice to link oneself to an organization by identifying with an organization's goals and values in such a way that the desire to maintain a connection to the organization develops (Mowday et al., 1979). Mowday et al. (1979) further defined organizational commitment as being related to active and not passive loyalty, a willingness to do more than what is required, and a desire to remain part of an organization. Other definitions of organizational commitment suggest that organizational commitment is comprised of multiple commitments to various referent groups such as customers, top management, or even unions (Reichers, 1985). One of the main reasons researchers examine organizational commitment is to understand the level of loyalty individuals have to organizations, as well as the antecedents and consequences of organizational commitment (Mowday et al., 1982); conversely, one of the main challenges with organizational commitment is the various ways researchers conceptualize the construct (Allen & Meyer, 1990).

One commonality found in the literature is that organizational commitment is typically distinguished as either an attitude or behavior (Mowday et al., 1982). Attitudinal commitment is thought-based and "conceptualized as a psychological state that reflects an employees' relationship to the organization" (Allen & Myer, 1990, p. 2). Behavioral commitment is action-based and can be thought of as a persistent or final course of action resulting from one's thoughts about loyalty to an organization (Allen & Meyer, 1990). While this distinction in the literature was useful, the need to set forth a consistent

definition for the attitude portion of organizational commitment was necessary as attitudinal commitment was not as transparent as its counterpart, behavioral commitment. Thus, in general, attitudinal organizational commitment has been consistently conceptualized as relating to an affective attachment, perceived costs, or an obligation to an organization (Meyer & Allen, 1987 a) based on an individual's psychological attachment to an organization.

Attitudinal commitment has been represented throughout the literature by three distinct dimensions – 1) Affective Commitment, 2) Continuance Commitment, and 3) Normative Commitment (Allen & Meyer, 1990; Meyer et al., 1993; Meyer & Allen, 2007). First, affective commitment is related to an employee's emotional attachment to an organization (Hunton & Norman, 2010). Furthermore, affective commitment is seen as the most beneficial dimension of organizational commitment to an organization (Mowday et al., 1982) as the belief is that employees that are affectively committed to the organization and ascribe to the organization's goals do so because they truly want to be members of the organization. Next, continuance commitment is defined as an employee's belief that staying with an organization affords certain cost avoidance and is typically the result of rewards and punishments (Meyer & Allen, 1997). Continuance commitment has primarily been explained by the term side bet or side –bet theory (Becker, 1960) which posits that human beings make 'side bets' (e.g., investments such as money, time, effort) that could be lost if an individual ceased to continue employment. Employees with continuance commitment are committed because the threat of loss is much greater than gain and that rational, single-handedly commits these types of individuals to an organization. For example, an individual working in a large company may decline an

opportunity to double their salary with a smaller company for fear of losing a lofty

pension plan or other organizational benefits. Finally, normative commitment refers to an

employee's feelings of obligations to stay with an organization because of their belief

that they should (Hunton & Norman, 2010) as a form of reciprocity. For example,

individuals with normative commitment may feel obligated to stay with a company that

provides for costly, industry-specific training (e.g., Cisco certification) that can be used in

other companies. Hunton and Norman (2010) distinctly summarized the three dimensions

as affective commitment means staying because you want to, continuance commitment

refers to staying because you need to, and staying because you should or have to refer to

normative commitment (Allen & Meyer, 1990).

These three distinct dimensions are also referred to as the Three Component

Model (TCM) of organizational commitment (Meyer & Allen, 1990; 2007) and have

been criticized by some researchers for containing behavioral components, in addition to

attitudinal components (Solinger et al., 2008). Solinger et al. (2008) suggested that

affective commitment was really the only attitudinal component while continuance and

normative commitment represented behavior that explicitly led to the action of leaving or

staying. Additionally, another criticism based on empirical studies (e.g., Meyer et al.,

2002; Cohen 2003) are that results consistently show that affective and normative

commitment dimensions are highly correlated. Nevertheless, the focus of this current

study is affective organizational commitment because affective commitment is the most

consistently, reliable dimension of organizational commitment (Meyer & Allen, 2002;

Cohen, 2003) and it has been shown to be most closely related to the other constructs of

this study - perceived relational demography (Riordan, 2001, Clark et al., 2002) and

procedural justice (Konovsky & Cropanzano, 1991).

2.3.2 Relevant Literature on Affective Commitment

     All three dimensions of organizational commitment can be experienced

simultaneously and at varying degrees. For example, individuals may want to stay (i.e.,

affective commitment) but have to leave for reasons such as family relocation or life

events (e.g., sickness, birth of a child, etc.). At the same time, individuals may also need

to stay (i.e., continuance commitment) but also feel obligated to stay (i.e., normative

commitment) for reasons such as financial well-being or other fringe benefits. Typically,

the commitment dimension of importance can be depicted based on specific antecedents

(Mowday et al., 1982) and affective organizational commitment has been shown to have

correlates, antecedents, and consequences.

     Although distinct, several variables are considered to be correlates of affective

commitment given their underlying affective quality. The most notable correlates of

affective commitment are job satisfaction, job involvement, and occupational

commitment (e.g., Mathieu & Zajac, 1990; Meyer & Allen, 1991; Meyer et al., 2002).

Edwin Locke (1969) defined job satisfaction as "the pleasurable emotional state resulting

from the appraisal of ones' job as achieving or facilitating the achievement of one's job

values" (p. 316). Furthermore, job satisfaction is based on a perception of what an

individual believes a job is offering as it relates to what they want from the job. Job

satisfaction has been shown to have the strongest association with affective commitment

as opposed to job involvement or occupational commitment (Meyer et al., 2002). The

distinction between job satisfaction and affective commitment is that job satisfaction

measures the level of contentment with duties associated to one's job or position and

affective commitment measures the level of desire to retain membership in one's organization. In a recent study (Gottlieb et al., 2013), researchers hypothesized that managers that perceived a sense of closeness with volunteers that they managed would have higher levels of job satisfaction and subsequently higher levels of affective commitment. Although other study variables (e.g., supervisor support and coworker respect) instead of closeness with volunteers depicted job satisfaction, there was confirmation that job satisfaction mediated affective commitment.

Job involvement is also considered a correlate of affective commitment. Job involvement is the level of cognitive participation or emotional attachment an individual has with a job (Morrow, 1983). The concept of job involvement is linked directly to feelings about one's job itself and not to feelings of attachment to the organization. Job involvement is very specific to the job or job duties and for the most part, can be done with the same emphasis irrespective of feelings for any particular organization. However, one would think that an affectively committed employee must be psychologically committed to their jobs. Nevertheless, job involvement is also different from occupational commitment which is another well-known correlate of affective commitment. Occupational commitment is the degree to which an employee is emotionally attached to a career and not just a job as in the case of job involvement. Occupational commitment is also distinct from affective commitment in that occupational commitment is related to an individual's attachment to a profession such as being a doctor, lawyer, or an engineer as opposed to a desire to maintain membership with any particular organization.

The experiences leading up to affective commitment have consistently aligned in the literature and most scholars have even agreed on similar categorizations for these antecedents. Meyer et al. (2002) focused on two categories of antecedents for affective commitment - personal characteristics and work experiences. However, antecedents of affective commitment were originally segmented into four categories: personal characteristics, job characteristics, work experiences, and structural characteristics (Mowday et al., 1982).

Personal characteristics such as age, tenure, and self-efficacy or the belief that one can be effective has shown a positive, yet weak, correlation with affective commitment (Meyer et al., 2002). Limited studies have consistently shown a relationship between standard demographics and affective commitment (Mathieu & Zajac, 1990). Organizational tenure more so than job tenure positively correlates to commitment (Mathieu & Zajac, 1990) indicating that the length of time with the company and not the length of time in a particular job is more important in terms of gauging commitment to an organization. With respect to education and gender, but in the context of an occupational moderator (e.g., blue collar versus white collar or low-status jobs versus high-status jobs), Cohen (1992) showed that when the relationship between the antecedent personal characteristic and affective commitment was moderated by job type that less educated blue collar workers were more committed than white collar workers and that blue collar females and white collar males were more committed. In support of Cohen's findings, but not specific to the dimension of affective commitment, education negatively correlates to organizational commitment as the thought is that more education leads to higher expectations that may be beyond the organizations' reach (Mowday et al., 1982) or more

job options may exist for those individuals with more education and therefore commitment is less important (Mathieu & Zajac, 1990).

Job characteristics are another driver of affective commitment. Job characteristics refer to activities associated specifically with the job itself such as scope, autonomy, and variety. Job scope or job description and autonomy positively correlate with affective commitment (Mathieu & Zajac, 1990) and job variety negatively correlates with affective commitment (Still, 1983).

The most notable antecedent related to affective commitment is the category of work experiences (Meyer & Allen, 1987; Allen & Meyer, 1990). Basically, work experiences are those day-to-day events that "fulfill employees' psychological needs to feel comfortable within the organization and competent in the work-role" (Allen & Meyer, 1990 p.4). Examples of work experiences include perceived organizational support, role ambiguity, and role conflict. Perceived organizational support is an antecedent of affective commitment (Rhoades et al., 2001) and within the US role ambiguity and role conflict correlate strongly with affective commitment (Meyer et al., 2002). Other notable work experience antecedents that are strong positive correlates of affective commitment include justice and transformational leadership (Meyer et al., 2002).

One final category of antecedents of affective commitment is structural characteristics. Structural characteristics such as decentralization of decision making is positively related to affective commitment (Brooke, Russell, & Price, 1988) but empirical confirmation regarding the influence of other factors such as work experiences has yet to be seen. However, Podsakoff et al. (1986) believed the structural characteristics would

likely always be mediated by work experiences such as employee/supervisor relations and role clarity.

There are several consequences of affective commitment. Outcomes of affective commitment are usually considered positive as affective commitment can lead to increased levels of organizational citizenship behavior (OCB) (Meyer et al., 2002), perceived organizational support (Eisenberger et al., 1986; Shore & Wayne, 1993), and performance (Meyer et al., 1989; Meyer et al., 2002).

Another consequence of affective commitment, albeit negative, is absenteeism, turnover intention or intent to leave, and ultimately turnover (Somers, 1995; Meyer et al., 2002). Turnover intention or intent to stay is the likelihood that an employee will continue membership in an organization (Mueller et al., 1994; Price & Mueller, 1981, 1986a) and has been shown to have a negative relationship with actual turnover (Iverson, 1992; Price & Mueller, 1981, 1986a). Affective commitment is the only dimension of organizational commitment that correlates negatively with absenteeism with an even stronger correlation towards voluntary absences as opposed to involuntary absences (Meyer et al., 2002). Employees with low levels of affective commitment to an organization tend to withdraw by having constant thoughts of quitting or thoughts of searching for another job. Affective commitment correlates more strongly with turnover and even more so with the thought of leaving than any other dimension of organizational commitment (Meyer et al., 2002; Bressler, 2010). This is likely due to the emotional and mental nature of the concept of affective commitment which can produce a draining experience when one goes from thinking of leaving to actually making a decision to leave something that they identify with and have similar values.

One more consequence of affective commitment is employee health and well-being (Meyer at al., 2002). On one hand, researchers have shown that affective commitment buffers stress (Begley & Czajka, 1993; Siu, 2002) while another scholar has shown that affective commitment is the source of stress (Reilly, 1994). Low levels of affective commitment are negatively correlated with stress because employees have a greater sense of detachment from the organization. Employees with high levels of commitment to the organization may invest more time in those activities that promote the organization and therefore experience greater levels of stress (Mathieu & Zajac, 1990). At the same time, affective commitment is thought to be so emotionally charged that employees with high levels of affective commitment may protect individuals from work stressors (Kobasa, 1982) and may perhaps even eliminate certain outcomes of burnout (Schmidt, 2007). Stress may be viewed as less threatening to affectively committed individuals because the experience of security and belonging espoused from affective commitment outweighs the threat of work stress (Meyer & Hersovitch, 2001).

From a theoretical perspective, affective commitment occurs because of a desire for goal congruence and the need to develop and maintain a rewarding relationship with an organization (Beck & Wilson, 2000). Affective commitment is related to an individual's positive emotional attachment and identification with an organization which involves accepting the influence of others in order to maintain a satisfying relationship (Kelman, 1958). Conceptually, identification is similar to the concept of affective commitment (Allen & Meyer, 1990). One of the most basic principles of identification with a group is a perceptual component that develops from the need of individuals to identify with certain characteristics perceived to be the most important to a group

(Riordan & Weatherly, 1999). In as much, the current study reconfirms the relationship between perceived demographic differences and affective organizational commitment in an effort to suggest a way to mitigate the need for identification while increasing an individual's emotional attachment to the organization.

2.4 The Relationship between Perceived Relational Demography and Affective Commitment

To date, only three peer-reviewed, published studies exist (e.g., Kirchmeyer, 1995; Riordan, 1997; Clark et al., 2002) that evaluate the relationship between perceived relational demography and organizational commitment. Although Kirchmeyer (1995) used the perceptual method to analyze demographic differences, the outcome measure was not specific to the affective commitment dimension of organizational commitment. Kirchmeyer (1995) measured organizational commitment at two points in time using commitment as an attitudinal (Mowday et al., 1982) and behavior-based outcome (Lee et al., 1992) finding no support for the argument that those perceived as demographically dissimilar (i.e., women and minorities) would have lower organizational commitment. However, Kirchmeyer's results may not be generalizable because the study was conducted during a recessionary period and at the time of the study many Canadian employers were not mandated to support workplace diversity. Slightly different from Kirchmeyer (1995), Clark et al. (2002) specifically studied the relationship between perceived demographic differences and affective organizational commitment. Although no significant relationship was found to exist between perceived demographic differences and affective commitment, the belief is that the theoretical premise of relational demography is based on perceptions and therefore support for direct measures of

perceptions (e.g., Riordan, 1997) should be considered in future research (Clark et al., 2002; Clark & Ostroff, 2003). Contrary to the results found by both Kirchmeyer (1995) and Clark et al. (2002), Riordan (1997) used a perceptual method to examine the relationship between relational demography and affective commitment and found that perceived differences was negatively related to affective commitment.

The perceptual approach, as compared to other methods used for calculating relational demography (i.e., D-score, interaction term, and polynomial regression) was proposed as the best method to use for predicting affective commitment from the most demographically dissimilar individuals (Riordan, 1997). Managers should be cognizant of the type of commitment employees have for the organization and effort should be made to foster affective commitment (Coleman et al., 1999) given its association with positive outcomes such as organizational effectiveness (Meyer et al., 2002), organizational citizenship behavior (OCB) (Meyer et al., 2002), perceived organizational support (Eisenberger et al., 1986; Shore & Wayne, 1993), and performance (Meyer et al., 1989; Meyer et al., 2002). However, the attainment of affective commitment may be difficult due to the affective nature of social identity and self-categorization theories (Tajfel & Turner, 1982; Clark et al., 2002) which promote the need to create emotional bonds for increased interpersonal attraction to others and as such may be problematic for those employees that are perceived as demographically dissimilar (Tajfel & Turner, 1982; Clark et al., 2002). The expectation is that perceptions of differences will lead to decreased levels of affective commitment to an organization because being perceived as dissimilar diminishes the desire to engage with others, potentially leading to decreased work ties, reduced communications, and greater emotional distances (Tsui & O'Reilly,

1989) and may lead to a desire to seek comfort through departure. Moreover, as stated previously, the similarity-attraction paradigm proposes that individuals prefer to be with those that are demographically similar instead of dissimilar to them because it creates a level of comfort which typically leads to more frequent communication about perceived shared experiences and a desire to maintain that affiliation (Tsui et al., 1992; Riordan, 2000; Cunningham, 2007). Maintenance of that potential affiliation is jeopardized for those perceived as demographically dissimilar compared to others in their immediate work unit (i.e., individuals reporting to the same supervisor/manager) and as such a reduction in the level of emotional commitment to the organization may occur. Therefore, the following hypothesis is proposed:

> H1: Perceived relational demography is negatively related to affective commitment for individuals demographically dissimilar to others in their work unit.

2.5 Telecommuting Intensity Overview

The main purpose of this section is to show that the moderating effect of telecommuting intensity serves as a positive moderating variable for the negative relationship between perceived relational demography and affective commitment. While the previous section proposed that relational demography negatively impacts affective organizational commitment, this section suggests that low-levels of telecommuting can mitigate that negative relationship. First, this section starts with a practical, yet academic, review of the current literature on telecommuting including its definition, benefits and detriments, as well as some significant facts about telecommuting. Furthermore, relevant literature on telecommuting is outlined for a more detailed overview of telecommuting as

it relates to diversity and commitment. Next, the variable of telecommuting intensity is introduced, defined, and relevant literature on this construct is discussed. Finally, relevant theories supporting telecommuting intensity are reviewed as a foundation for the proposed moderated relationship.

2.5.1 Definition of Telecommuting

Telecommuting as a term was first coined by Jack Nilles (Nilles, 1975). The term is used interchangeably in business with several other terms such as teleworking, virtual work (Siha & Monroe, 2006), and virtual team (Hakonen & Lipponen, 2008). Nilles (1994) and Olson (1983) defined telecommuting as the opportunity to work from home or a remote location rather than a central business location by using networked computer equipment. Furthermore, Hunton and Norman (2010) stated that the work must occur within a specific interval such as "periodically, regularly, or exclusively" (p. 68). A nonprofit human resource organization, WorldAtWork, provides a distinction between telecommuting and teleworking. In today's business environment, telecommuting most commonly refers to workplace flexibility. This means that a telecommuter has the flexibility to work from home or a remote location, usually during normal work hours. Telecommuting "enables employees to perform assigned tasks in a 'boundary-less' organization and with personal discretion, in many cases, as to time, place, and pace of task achievement without direct employer supervision" (Raiborn & Butler, 2009, p. 32). Teleworking involves performing all of one's work from home or another remote location (WorldAtWork, Telework Trendlines 2009). The focus of this current study is telecommuting.

The failure to define telecommuting in a consistent manner across studies has presented significant gaps in drawing reliable conclusions about the phenomenon. To reduce these gaps and inconsistencies, it has been suggested that future researchers disclose, at a minimum, three important criteria when researching telecommuting: definition, quality, and quantity (Mokhtarian et al., 2005). Consequently, an improved guideline was offered by Thatcher and Zhu (2006) who identified three dimensions that differentiate a telecommuting environment from the standard, traditional central office: "location of work, time spent telecommuting and the voluntary nature of the telecommuting decision" (p. 1078). The location of work can be either home-based, satellite office, or mobile office (Greengard, 1994; Tanzillo, 1995). Time spent telecommuting should be identified as either full-time or part-time (Barnes, 1994) or measured as a continuous number of hours. The nature of the telecommuting decision can be described as voluntary or involuntary (Roberts, 1994; Baig, 1995). This current study's consideration is towards home-based, full-time and part-time (to be discussed later) telecommuting intervals, and voluntary telecommuting conditions.

2.5.1.1 Telecommuting Facts

The number of people participating in telecommuting is difficult to quantify because telecommuting has varying definitions (Siha & Monroe, 2006) based on the telecommuting dimensions studied. Given this point, Mokhtarian et al. (2005) suggested that researchers consider context when making the case for telecommuting, while also choosing the appropriate level of telecommuting frequency. That is to say, if the research is related to telecommuting sales people, then it may be appropriate to focus on daily or weekly intervals of telecommuting instead of monthly given that sales people normally spend a considerable amount of time away from the office. In addition, past statistics on

telecommuting have failed to specify a common point of reference or interval with which individuals telecommute and, therefore, shaping reliable trends regarding how many and how often US workers telecommute is difficult. Therefore, in support of using consistent intervals during data collection, a recent study indicated that out of a total of 150 million workers in the US in 2006, more than 14.7 million workers reported telecommuting full-time, with that number decreasing to 13.5 million telecommuters in 2008 (WorldAtWork Telework Trendlines, 2009). The decrease in the number of full-time telecommuters may be the result of unconfirmed but popular issues such as decreased commitment, increased turnover, or economic factors during this time (e.g., the "Great Recession[1]" (The Great Recession, n.d.)). On the other hand, telecommuting trends have increased for those telecommuting periodically. In the same WorldAtWork Telework Trendlines (2009) study, more than 24 million workers reported telecommuting at least 1 day per week in 2008 which is an increase from 22 million workers in 2006 and a separate group of respondents revealed that 17.2 million workers telecommuted at least 1 day per month in 2008, representing an increase from 12.4 million workers in 2006.

Similar to the difficulty of quantifying the number of telecommuters is the challenge of identifying the type of worker who telecommutes, as well as job types which are suitable for telecommuters. The typical telecommuter is 49-years old, college educated, and earning more than $50,000 annually working at a company with more than 100 employees (Lister & Harnish, 2011). The most popular occupations for telecommuters are professional (25%); executive, administrative, and managerial (22%);

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[1] The Great Recession officially lasted from December 2007 until June 2009. This period of financial economic downturn in the US was thought to be the result of an 8 trillion dollar collapse of the real estate market which resulted in unemployment and underemployment.

and sales (18%) (WorldatWork Telework Trendlines, 2009). Historically, the best candidates for telecommuting jobs were women with school aged children, students, or handicapped persons (Risman, 1989). These types of individuals (i.e., those that require more flexible time schedules) were thought to be suitable for positions such as call center agents, medical coders/transcribers, loan processors, virtual assistants, and telemarketers but more recent job types for telecommuters have grown to include registered nurse clinical case managers (i.e., a consultative role where an individual is responsible for assessing the quality of a particular health care program), high school teachers, principal scientists, and medical directors (Reynolds, n.d.a).

Individuals who telecommute and organizations that allow telecommuting must agree on the parameters by which telecommuting will be considered an effective, alternative workplace option for the business. Beyond suitable job types, effective telecommuting requires three additional, simultaneous conditions to be met – 1) supportive organizational culture, 2) clear separation between home and work responsibilities when telecommuting, and 3) individual fit with respect to personality and work ethics (Baruch & Nicholson, 1997). Corporate culture often reflects a collective way of thinking based on experiences and perceptions that are shared when employees and managers physically *see* one another (Olson, 1988). Additionally, corporate culture can be one of the main deterrents of telecommuting given the historical importance that corporations have typically placed on visibility (Christensen, 1992; Duxbury et al., 1992, Hoang, et al., 2008). Visibility in the workplace has long been an important metric for managers to evaluate employee performance and a shift to managing by results, rather than visibility, will be necessary for telecommuting to be successful.

Effective telecommuting also requires the employee to have self-discipline when not in their corporate work environment with the ability to be able to balance work and home activities (Reinsch, 1997; Harpaz, 2002). In addition to self-discipline, effective telecommuting requires the telecommuter's personality to fit the atmosphere of telecommuting. Personality traits such as Agreeableness (Cooperative) and Conscientiousness (Dependability) have been found to have a positive relationship with an employee's attitude towards telecommuting (Goldberg, 1990; Clark, 2007). However, despite identification of who can telecommute, suitable telecommuting jobs, and personality-fit for telecommuting, it is still essential to understand the benefits and detriments of telecommuting, as there are impacts to more than just the telecommuter, but also the employer and society.

2.5.1.2 Advantages and Disadvantages of Telecommuting

Telecommuting can provide both advantages and disadvantages to the employee, employer, and the environment. The most notable benefits of telecommuting for employees include autonomy (Risman, 1989; Hochschild, 1997; Basso, 1999; Harpaz, 2002; Hoang et al., 2008), increased income opportunities (Risman, 1989), better quality of life (Duxburry et al., 1991; Basso, 1999; Harpaz, 2002; Hoang et al., 2008), increased organizational commitment (Hunton & Norman, 2010), flexibility in work location and time leading to reduced stress levels (Hoang et al., 2008), and decreased financial expenditure for items such as gas and maintenance of professional attire (Gajendran & Harrison, 2007; Hoang et al., 2008). Benefits of telecommuting for the employer may be lower real estate costs (Risman, 1989; Christensen, 1992; Davenport & Pearlson, 1998), increased productivity and worker availability (Risman, 1989; Davenport & Pearlson, 1998; Basso, 1999; Hoang et al., 2008), increased employee satisfaction and decreased

absenteeism (Hoang et al., 2008), reduction in employee turnover (Kirk & Belovics, 2006; Kurland & Bailey, 1999), results oriented managers (Potter, 2003) and even the potential to increase diversity by hiring those workers (e.g., women) that may require flexibility (Feldman & Gainey, 1998) due to life events such as the birth of a child.

During the early adoption stages of telecommuting, organizations began to leverage telecommuting to tap into talent pools that were previously restrained by distance and noted it as a competitive advantage (Davenport & Pearlson, 1998; Christensen, 1992). Consequently, Human Resource recruiters began to use telecommuting as a recruiting tool as it motivated potential and existing employees (Risman, 1989) while also improving the company's image (Dimartino & Wirth, 1990; Hill et al., 2003; Hoang et al., 2008). Finally, a range of telecommuting benefits for the environment have been identified such as energy and road infrastructure savings, to decreased Greenhouse gas emissions by having fewer cars on the road, and government compliance with such mandates as the Clean Air Act and Americans with Disabilities Act (Harpaz, 2002; Hoang et al., 2008). For example, Lister and Harnish (2011) estimate that oil savings would equate to over 37 percent of the US Persian Gulf imports and that Greenhouse gas reduction would be the equivalent of taking the entire New York State workforce permanently off the road if qualified telecommuters worked as little as half the time from home.

There are critics of the telecommuting phenomenon who believe that telecommuting will never reach the promise of mass usage as predicted because there are just as many disadvantages as there are advantages. Some of the leading disadvantages of telecommuting for employees include social isolation (Baumeister & Leary, 1995; Hoang

et al., 2008), diminished relationships with coworkers (Huws et al., 1990), perceptions of

employee slacking, technology issues (Reinsch, 1997) such as slow or inactive

connections, distracting home environments (Davenport & Pearlson, 1998; Hoang et al.,

2008), legal issues likely regarding allowances or deductions for tax purposes,

perceptions of always being available, and even decreased promotion opportunities

(Hoang et al., 2008). Disadvantages of telecommuting for employers include loss of

managerial control (Duxburry et al., 1989), diminished trust in employees (Perin, 1991)

and reduced corporate loyalty and organizational commitment because the telecommuter

may view themselves as an independent contractor with diminishing psychological

connections to the organization (Pratt, 1984). Furthermore, employers believe that

telecommuting increases transitional costs with management having to learn new

methods of managing these telecommuters, in addition to legal issues for concerns such

as workman's compensation, health and life insurances (Harpaz, 2002), and security

concerns (Hemby, 2010) over employees having sensitive customer information at home.

Finally, the main disadvantage of telecommuting for society is the potential creation of a

"detached society" (Harpaz, 2002 p 79) where individuals are myopically focused on

their work. However, a counterpoint to the creation of detached society may be that

telecommuting is supported by a specific technology medium (e.g., smart phones with

cellular coverage, laptops with wired or wireless connections). Therefore, it is not the act

of telecommuting that would directly lead to a detached society as much as it could be the

underlying technology that supports telecommuting in a very insular, self-absorbed

fashion. A summary of the advantages and disadvantages of telecommuting that have

been identified in previous literature are listed in Table 1 below.

Table 1. Telecommuting Advantages and Disadvantages

Table format adapted mostly from Harpaz (2002) and Hoang et al. (2008)

	Advantages	Disadvantages

Employee	• **Autonomy** (Risman, 1989; Hochschild, 1997; Basso, 1999; Harpaz, 2002;
	• **Better quality of life** (Duxburry et al., 1991; Basso, 1999; Harpaz, 2002;
	• **Increased financial savings** (Gajendran & Harrison, 2007; Hoang et al.,
	   o Less gasoline needed
	   o Less investment needed for professional attire
	• **Increased income opportunities** (Risman, 1989)
	• **Increased organizational commitment** (Hunton & Norman, 2010)
	• **Reduced stress** (Hoang et al., 2008)
		• **Decreased promotion opportunities** (Hoang et al., 2008)
		• **Diminished relationships with Coworkers** (Huws et al., 1990)
		• **Distracting home environment** (Davenport & Pearlson, 1998; Hoang et
		• **Legal issues** (Hoang et al., 2008)
		• **Perceptions of always being available** (Hoang et al., 2008)
		• **Perceptions of not working by managers** (Reinsch, 1997)
		• **Potential technology issues** (Davenport & Pearlson, 1998; Hoang et al.,
		• **Social isolation** (Baumeister & Leary, 1995; Hoang et al., 2008)

Employer	• **Better corporate image** (Dimartino & Wirth, 1990; Hill et al., 2003; Hoang • **Decreased absenteeism** (Kirk & Belovics, 2006; Kurland & Bailey, 1999) • **Increased diversity** (Feldman & Gainey, 1998) • **Increased productivity** (Risman, 1989; Davenport & Pearlson, 1998; Basso, 1999; Hoang et al., 2008) • **Increased worker availability** (Risman, 1989; Davenport & Pearlson, 1998; Basso, 1999; Hoang et al., 2008) • **Lower real estate costs** (Risman, 1989; Christensen, 1992; Davenport & • **Motivated employees** (Risman, 1989) • **Recruiting tool** (Davenport & Pearlson, 1998; Christensen, 1992) • **Reduction in turnover** (Kirk & Belovics, 2006; Kurland & Bailey, 1999) • **Results-oriented managers** (Potter, 2003)	• **Increased costs to transition and train managers** (Harpaz, 2002) • **Legal issues** (Harpaz, 2002) • **Loss of managerial control** (Duxburry et al., 1989) • **Reduced corporate loyalty** (Pratt, 1984) • **Reduced organizational commitment** (Pratt, 1984) • **Security concerns** (Hemby, 2010) • **Trust that telecommuters are actually working** (Perin, 1991)

Environment /Society	• **Increased financial savings** (Harpaz, 2002; Hoang et al., 2008)
	   o Energy
	   o Road infrastructure
	• **Reduced Greenhouse emissions** (Lister and Harnish, 2011)
		• **Detached society** (Harpaz, 2002 p 79)

2.5.2 Relevant Literature on Telecommuting

Nearly 40 years have passed since Jack Nilles (Nilles, 1974) started the discussion on telecommuting. Consequently, there are a plethora of articles on the topic, but overall very little peer reviewed, and even less empirical research, exists on the telecommuting phenomenon (Feldman & Gainey, 1997; Siha & Monroe, 2006). Early researchers even considered the telecommuting phenomenon as atypical and atheoretical (e.g., McCloskey & Igbaria, 1998; Hartman et al., 1992) and when quality research was delivered, it generally explored direct, linear relationships (e.g., Reinsch, 1997; Golden 2006) with less focus on contextual considerations or potential mediators/moderators. For example, a study examining the direct relationship between a telecommuter and his supervisor, found that telecommuters who had been telecommuting for at least seven or more months reported regressed relationships with their immediate supervisors (Reinsch, 1997) but there was little insight regarding moderators (e.g., job satisfaction) that could have potentially reduced these negative effects. In general, the most notable outcome variables studied in relation to telecommuting have been productivity (e.g., Hartman et al, 1992; Pratt, 1999; Westfall, 2004), performance (e.g., Belanger, 1999; Virick et al., 2010); Golden et al., 2008), job satisfaction (e.g., Hartman et al., 1992; Golden & Veiga 2005; Virick et al., 2002), and organizational commitment (e.g., Hill, 1995; Igbaria & Guimaraes, 1999; Golden, 2006; Da Silva & Virick, 2010; Hunton & Norman, 2010; Faye & Kline, 2012).

In particular, research by Belanger et al., (2001) examined three notable outcome variables in one study (i.e., perceived productivity, performance, and satisfaction) as each related to a specific relationship with telecommuting – 1. Advanced information systems available to telecommuters (e.g., electronic devices, technology medium used for

connection to company resources, etc.), 2. Advanced communication systems available to telecommuters (e.g., teleconferencing, videoconferencing, email, and voicemail) and 3. Communication patterns between telecommuters and non-telecommuting work groups. Important results of the Belanger et al. (2001) study indicated that higher levels of work group communication negatively impacted telecommuters' perceived productivity. The more telecommuters communicated with their work group, the more they perceived themselves to be unable to meet productivity expectations. In this same study, perceived performance by the telecommuter decreased as the level of communication patterns between telecommuters and their non-telecommuting work group members increased, suggesting that co-worker interruptions may be just as disruptive in a remote setting as they can be in a physical office environment. Additionally, as part of the same study, telecommuters' performance perceptions were dependent on the availability of advanced information systems and communication technologies. As the advanced technologies increased, the level of satisfaction also increased amongst telecommuters implying that a remote technology atmosphere similar to the telecommuters', physical work environment allows the telecommuter an opportunity to provide the same quality of work irrespective of location. Diverging from the Belanger et al. (2002) study, one section of this current study examines telecommuting in the context of demographic and commitment variables which has been of less interest to researchers but may be of obvious importance to the business community given the growth of diversity in the workplace and the increased use virtual work settings.

To date, research exploring the relationship between demographics and telecommuting has produced limited, if any, significant results (Bailey & Kurland, 2002)

with only a few notable pioneers (e.g., DeSanctis, 1984; Teo et al., 1999; Belanger, 1999b, Baruch, 2000). For example, Reinsch, (1997) found that gender and age could predict the relationship quality between a telecommuter and his or her supervisor such that younger male telecommuters reported more positive relationships with their supervisors than older females. However, the study (Reinsch, 1997) was cross-sectional and not longitudinal and therefore the relationship quality may not be a direct result of gender or age and may be the result of other factors such as the early phase of the relationship or "honeymoon" phase (Reinsch, 1997) or the demographic dissimilarity of the dyadic relationship. In another study, there were no significant differences between telecommuters and non-telecommuters with respect to gender, age, or organizational tenure (Belanger, 1998). Additionally, this same study (Belanger, 1998) found that gender did not have an impact on a worker's decision to telecommute. There was some indication in this study that females could be more at risk of being forced to telecommute than males.

On the other hand, some research on demographics and telecommuting has produced a few interesting findings. Overall, women rate the advantages of telecommuting more highly than men (Mokhtarian et al., 1998). Baruch (2000) found that men who telecommuted were found to be actively searching for another job. However, women tend to perceive themselves as more disciplined than men and women, more than men, were more motivated by telecommuting and perceived telecommuting as benefiting their family and themselves (Mokhtarian et al., 1998). Moreover, women perceived their membership as a telecommuter as more inclusive, more satisfying, and more supporting than men (Lind, 1999). Other visible demographics such as age (Hartman et al., 1991)

and race have been reported as having no significant relationship with telecommuting although minorities have been shown to be more expressive in their opinions when telecommuting (McLeod et al., 1997). It is certainly plausible that demographic variables alone would have little impact on the success of individual telecommuters; however, it is conceivable that stereotyping of visible demographic differences may be reduced by the frequency with which an individual telecommutes due to the lack of constant face-to-face interactions.

2.5.3 Definition of Telecommuting Intensity

Telecommuting intensity is the term used to describe the level of frequency or interval of time telecommuters' work between the central-office and a specified or unspecified remote location (Gajendran & Harrison, 2007). Telecommuting intensity is typically captured as the number of days per week that an individual works from home (Matthews & Williams, 2005) but could also be recorded as any interval of time (i.e., hours or days) an individual telecommutes during a given period (Mokhtarian & Meenakshisundaram, 2002), usually daily, weekly, or monthly. Telecommuting intensity is sometimes used interchangeably with extent of telecommuting (Golden et al., 2005). To clarify, telecommuting intensity is categorized as either low-intensity (i.e., less than 1 or 2 days per week) or high-intensity (i.e., 3 or more days a week) and extent of telecommuting is usually assessed by the actual number of hours worked away from a central office location. At one time in the United States, more than eighty percent of telecommuters considered themselves low-intensity telecommuters (Kuenzi & Reschovsky, 2001).

Despite limited peer reviewed, empirical studies on telecommuting intensity (e.g., Gajendran & Harrison, 2007; Fonner & Roloff, 2010), scholars advise that telecommuting intensity is an important characteristic of telecommuting (Mokhtarian & Meenakshisundaram, 2002) and an exceptionally strong moderator (Cooper & Kurland, 2002). Telecommuting intensity is an important characteristic of telecommuting because research has shown that there are distinct differences in the experiences of telecommuters based on the amount of time telecommuters spend working away from a central location (e.g., Kurland & Egan, 1999; Golden et al., 2006; Copper & Kurland, 2002; Virick et al., 2010). In consequence, research has shown that there is an invisible line or "psychological threshold" crossed when someone telecommutes less than 2 days per week (low-intensity) versus someone that telecommutes 3 days or more per week (high-intensity) (Meehl, 1992).

A review of the literature reveals this previously mentioned distinction in relationship to several organizational outcomes (e.g., relationship quality, productivity, job satisfaction, and commitment) for high-intensity telecommuters and low-intensity telecommuters, as well as non-telecommuting workers. For example, high-intensity telecommuters have been shown to have high-quality relationships with their supervisors; however, high-intensity telecommuters were also found to have more negative relationships with co-workers than low-intensity telecommuters (Gajendran & Harrison, 2007). This could be interpreted to mean that low-intensity telecommuters have more opportunity for informal communication (i.e., chatter, gossip, visual cues, etc.) because they are physically in the office a few days during each week leading to better quality coworker relationships. On the other hand, high-intensity telecommuters are likely to

routinely communicate with their supervisors opposed to their coworkers thereby decreasing connections with their coworkers but increasing their supervisory bond. Furthermore, high-intensity telecommuters have to develop rich interaction routines in order to sustain their in-office identities (Thatcher & Zhu, 2006) if they are to remain connected to their non-telecommuting co-workers.

In another study, Hartman et al. (1991) found that perceptions of productivity declined for high-intensity telecommuters. However, a counter argument of this finding by Hartman et al. (1991) is that the ability of high-intensity telecommuters to accurately gauge their productivity may be less accurate than low-intensity telecommuters given their limited time in the office and the likelihood that high-intensity telecommuters may take on less meaningful work than low-intensity telecommuters. On the other hand, another study has shown an increase in perceived productivity when going from some interval of telecommuting to an increase in telecommuting (Belanger et al., 2001), which may suggest that the more an individual telecommutes, the more they perceive productivity gains. In addition, other studies have found that telecommuting leads to increased job satisfaction (Bailey & Kurland, 2002) but only up to a certain point (Golden & Veiga, 2005). In other words, job satisfaction ceases to increase after a certain threshold has been reached (Virick et al., 2010). As a final point, telecommuting intensity has shown conflicting results with regard to commitment. High-intensity telecommuters have a more difficult time developing feelings of commitment given their intense isolation and in some cases, high-intensity telecommuting has been shown to be harmful to commitment (Da Silva & Virick, 2010; Fay & Kline, 2012) and in other

instances high-intensity telecommuting has been found to be positively related to commitment (Golden, 2006).

In general, low-intensity, as opposed to high-intensity, telecommuting has been reported to deliver the most positive work outcomes (Baruch & Nicolson, 1997; Virick et al., 2010) but non-telecommuting co-workers are also important to consider. Telecommuters have been found to be more committed to the organization than non-telecommuters (Da Silva & Virick, 2010) and that may likely be the result of non-telecommuters having less job autonomy and job satisfaction, as well as more turnover intentions than telecommuters (Gajendran & Harrison, 2007). Furthermore, non-telecommuters may view telecommuters as working less diligently (Golden & Veiga, 2005; Thatcher & Zhu, 2006); however, it is possible that this perception by non-telecommuters changes with low-intensity telecommuters. In short, non-telecommuters may perceive low-intensity telecommuters with equal workload responsibilities because low-intensity telecommuters are physically and routinely in the office to defend, if necessary through informal communication channels, and show their work contributions. Consequently, telecommuters may rely on informal talk to clarify perceptions (Fay & Kline, 2011) with low-intensity telecommuting mitigating perceptions of work imbalance by being visible and having periodic informal, face-to-face communication with non-telecommuting coworkers.

2.5.4 Relevant Theories Supporting Telecommuting Intensity

Given the limited research available using the variable telecommuting intensity, there is even less research that incorporates a theoretical model to help further our understanding of telecommuting intensity. Conservation of Resources (COR) theory

(Hobfoll, 1988, 1989) has been used to explain that the geographical and psychological separation offered by telecommuting intensity lessens resource depletion for individuals from the mental and emotional drains caused by work exhaustion (Golden, 2006). The thought is that telecommuting at some specified interval allows for consistent breaks from the traditional "corporate rat race[2]" (Ulasien, 2006) and that telecommuting provides for resource recovery that is an opportunity to replenish ones' abilities. For example, Golden (2006) found that work exhaustion partially mediated the relationship between telecommuting intensity and organizational commitment. Golden (2006) argued that high-intensity telecommuting resulted in the ability to minimize interruptions which reduced conflict and therefore, high-intensity telecommuting led to low levels of work exhaustion which in turn led to high levels of organizational commitment.

Structuration (Giddens, 1984) and constructivist theories (Delia et al., 1982) have also been used to explain telecommuting intensity. Structuration theory is the belief that humans and some form of social structure are necessary for routine social interaction. Constructivist theory posits that people actually learn more from their informal social interactions which produce their social system and the world around them. Fay and Kline (2011) used structuration and constructivist theories as a way to explain how high-intensity telecommuters could mitigate feelings of isolation through the use of routine informal communication structures which was found to be positively related to organizational commitment. While these two theories are relevant to telecommuting, it is also important to examine telecommuting intensity as it relates to relational demography

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[2] The "corporate rat race" is a phrase used to comparatively describe the seemingly never-ending cycle of job demands in the US workplace to a race of rats running through a maze or to lab rats running on a wheel.

and affective commitment. Nevertheless, in this section of the current study, the variables (i.e., relational demography, telecommuting intensity, and affective commitment) are more theoretically aligned to theory of psychological contracts (Rousseau, 1989).

The theory of psychological contracts originated with Chris Argyris (1960) and Edgar Schein (1965) and it explains the mutual expectations between employees and employers beyond a formal employment contract. The theory of psychological contracts is an informal contract that is characterized by unwritten promises such as trust, compassion, respect, empathy, fairness, loyalty, and objectivity (Kingshott & Pecotich, 2007). Furthermore, a psychological contract is a subjective perception that is typically based on a focal person's interpretation of an unspoken promise. For example, in a supervisor-subordinate dyad, there is usually a perception of "reciprocity and mutuality" (p 463) by the subordinate (Sels et al., 2004). Beyond the focal persons' perspective, the theory of psychological contracts was further developed by Rousseau (1989) and today, the theory applies to unwritten agreements at all levels of human relationships from single and multiple foci perspectives.

Generally, psychological contracts are assessed using a specific method. Extant literature (e.g., Rousseau & Tijoriwala, 1998) recommends use of one of three approaches when examining psychological contracts – 1. Content-oriented, 2. Feature-oriented, and 3. Evaluation-oriented. The content-oriented approach examines specific contractual terms and the evaluation-oriented approach assesses the degree of success or failure of a psychological contract. Both approaches, content-oriented and evaluation-oriented, have been immensely studied but little research regarding the feature-oriented approach is available. A feature-oriented approach provides information related to the

degree to which a contract is considered implicit/explicit or written/unwritten. In terms of

telecommuting, in many organizations telecommuting is outlined loosely in a formal

policy however frequency of telecommuting is usually based on an unwritten agreement

between a telecommuter and his/her direct supervisor. Telecommuting intensity can be

viewed as a feature-oriented approach of psychological contracts based on the way it's

conveyed and interpreted by both parties as an unspoken, mutually beneficial agreement.

2.5.4.1 Relational Demography and Telecommuting Intensity Explained Through Psychological
Contracts Theory
        The degree of telecommuting is likely to lessen perceptions of demographic

differences as explained by the theory of psychological contracts. Though many elements

of the psychological contract are consistent across racial and ethnic groups, there appears

to be an additional set of expectations unique to minorities (Chrobot-Mason, 2003).

These expectations include factors such as "minority representation, elimination of

systemic bias, support for unique minority issues, and equal valuation of diverse

perspectives" (Avery et al., 2007, p 879). The notion is that an organization that shows

concern for diversity is perceived as a more inclusive organization by minorities because

showing support for a cause aligned with minorities can be more meaningful for

minorities than for majorities (Ashforth & Mael, 1989). The intensity with which an

individual telecommutes may be interpreted as an unwritten agreement of trust between

the minority employee and their organization which may produce feelings of adoration by

the minority employee. In other words, the most demographically different individuals

may view the opportunity to telecommute at specified intervals as a caring gesture (e.g.,

showing concern for minority issues such as the lack of minority representation) by their

employer and a potential way to compensate for the lack of diversity. Ultimately, the

employee's perceived demographic differences may become less salient because the

minority employee would be less visible in the central office environment but would still

maintain some consistent face-to-face interactions at a low-intensity level of

telecommuting. Having committed employees is important to employers and low-

intensity telecommuting has been shown to increase commitment (Hunton & Norman,

2010; Fay & Kline, 2012; Da Silva & Virick, 2010). More specifically, the present study

proposes that affective commitment will increase most strongly for the most

demographically different employees given the feelings of acceptance and adoration that

may be generated because of being trusted with workplace flexibility.

2.5.4.2 Affective Commitment and Telecommuting Intensity Explained Through Psychological
Contracts Theory

Telecommuting intensity's relationship with affective organizational commitment

may be explained by the theory of psychological contracts (Hunton & Norman, 2010).

The presence of psychological contracts has been shown to lead to higher levels of

affective commitment (Millward & Hopkins, 1998; Hunton & Norman, 2010). In the US,

contracts are inherently made when people have voluntary opportunity to do so

(Rousseau, 1995). Employees perceive that telecommuting *is* a psychological contract,

which may explain why feelings of obligation and commitment develop from

telecommuting employees towards their organizations (Hunton & Norman, 2010). Again,

one of the most notable benefits of telecommuting for employees includes job autonomy

(Risman & Tomaskov-Devey, 1989; Hochschild, 1997; Basso, 1999; Harpaz, 2002;

Hoang et al., 2008) and telecommuting has been found to be positively related to job

autonomy (Mathieu & Zajac, 1990; Gajendran & Harrison, 2007). Moreover, job autonomy

has been found to be highly correlated with both psychological contracts and affective

commitment (Azim et al., 2012). This could be interpreted to mean that greater job autonomy leads to feelings of honorability and fulfillment of unwritten promises which in turn leads to feelings of commitment in an exchange relationship. Finding ways to keep employees committed to organizations has been one of the most popular reasons for companies to adopt telecommuting (Risman & Tomaskov-Devey, 1989) as an alternate workplace solution. In fact, a recent study predicted a positive relationship between telecommuting and organizational commitment and found support for increases in the statistical mean of all dimensions of organizational commitment (i.e., affective, continuance, and normative) when going from *no* telecommuting to allowing (i.e., choice) telecommuting in all scenarios *except* working exclusively from home (Hunton & Norman, 2010) or high-intensity telecommuting. Moreover, the lack of choice in telecommuting arrangements can lead to stress and negative affect (Thomas & Velthouse, 1990) as cited by Gajendran and Harrison (2007). In the post-experiment phase of the longitudinal study by Hunton and Norman (2010), results for telecommuting's relationship with commitment were higher for affective commitment than all other dimensions of commitment. So from prior research, it appears that low-to-moderate levels of telecommuting are positively related to all three dimensions of organizational commitment but telecommuters are most likely to report that they are committed to the organization because they want to be.

In general, telecommuters have been shown to be more committed to the organization than non-telecommuters (Igbaria & Guimaraes, 1999) and specifically, more positive work outcomes have been reported for low-intensity telecommuting such as higher levels of employee satisfaction (Golden & Viega, 2005), better job satisfaction

(Gajendran & Harrison, 2007), perceptions of increased productivity (Belanger et al., 2001), and affective commitment (Hunton & Norman, 2010). Interestingly, with respect to organizational commitment, high-intensity telecommuting has also been shown to be positively related to commitment (Golden, 2006). However, this research (Golden, 2006) did not specify the dimension of commitment studied and therefore, the results provide an opportunity to identify the degree of telecommuting that is most positively related to a specific dimension of commitment. Again, low-intensity telecommuting may also lead to higher levels of commitment, as well, due to perhaps limited interruptions, especially on telework days. However, a stronger argument can be made as it relates to low-intensity telecommuters being more committed because of the potential for a dual reward. Low-intensity telecommuting not only affords individuals with minimal interruptions to complete work-related tasks, just as high-intensity telecommuting, but low-intensity telecommuting also allows for maintenance of physical, face-to-face contact which may improve social interactions and social ties (Cooper & Kurland, 2002; Thatcher & Zhu, 2006).

Conceptually, the relationship between telecommuting intensity and organizational commitment may not be linear as originally reported (Golden, 2006). Da Silva and Virick (2010) proposed a curvilinear (i.e., inverted U shaped) relationship between telecommuting intensity and job satisfaction (i.e. a correlate of commitment) such that moderate levels (i.e., some level less than high-intensity) of telecommuting may lead to the highest levels of job satisfaction. The same could potentially be said of commitment in that gains to affective commitment are lost or level-off as telecommuting intensity increases. The assertion is that telecommuting 3 or more days a week leads to

more isolation and an opportunity for high-intensity telecommuters to become engaged in

more non-work related activities (Kurland & Egan, 1999) which in turn may reduce their

commitment to the organization after this 3 or more days threshold is crossed. Based on

the theory of psychological contracts, low-intensity telecommuting more than high-

intensity or no telecommuting may lead to higher levels of affective commitment because

fulfillment of unwritten promises may be compounded for low-intensity telecommuting

in the form of more benefits (e.g., better social ties, and increases in perceived

performance and productivity). More than high-intensity telecommuting or no

telecommuting, low-intensity telecommuting may produce the highest level of

commitment to an organization given the opportunity to maintain an emotional bond with

both high-intensity telecommuting and non-telecommuting individuals. Therefore the

following hypothesis is set forth:

> H2: The relationship between telecommuting intensity and affective commitment
>
> is strongest for low-intensity telecommuters than for high-intensity telecommuters
>
> or non-telecommuters.

2.6 Telecommuting Intensity Moderates the Relationship between Perceived Relational
Demography and Affective Commitment

Telecommuting intensity as a moderating variable has been overlooked in the

organizational behavior literature with a few exceptions (e.g., Gajendran & Harrison,

2007). Consequently, there is an absence of empirical articles that examine the

moderating effects of telecommuting intensity on the relationship between perceived

relational-demography and affective commitment as explained by the theory of

psychological contracts. Extant literature has shown that the more demographically

different an individual is than the majority of the group in an organizational unit, the

more likely that individual is to leave the organization (Tsui et al., 1992) and the less committed they are to the organization. The need for a psychological contract or unwritten agreement can develop, especially for those that are demographically dissimilar from their peers and may be interpreted by these individuals as an opportunity by their employer to balance fairness (Rousseau, 1995) in response to a lack of diversity. That is to say that perceptions of fairness may exist from minorities that telecommute because they view telecommuting as a way to "level the playing field" thus making their demographic differences less salient. For example, in scenarios where minority representation is low, a psychological contract in the form of telecommuting for a minority individual may be perceived by the employee to represent the ultimate level of trust and concern. In turn, this gesture may yield affective commitment and likely overrides feelings of being demographically different as long as the interval of telecommuting is not extensive so as to isolate an individual.

The current study proposes that the negative relationship between perceived relational demography and affective commitment may become weaker through the use of a positive moderator such as telecommuting intensity as explained by the theory of psychological contracts using the feature-oriented approach. As such, an opportunity to further the understanding of the feature-oriented approach was led by Sels et al. (2004) whereby six dimensions (i.e., tangibility (intangible/tangible), scope (narrow/broad), stability (stable-flexible), time frame (long-/short-term), exchange symmetry, and contract level (individual/collective)) of psychological contracts were proposed. A psychological contract such as telecommuting that is perceived to be generated based on a long-term relationship (time frame), between a subordinate and their supervisor

(exchange symmetry), and is available to others in the work unit (collective) have been found to be positively related to an individual's affective commitment to an organization (Sels et al., 2004). Moreover, similarities between psychological contracts from a relational perspective (i.e., social in nature and based on trust and not bounded by time) have been shown to be very similar, conceptually and empirically, to affective commitment (Etzioni, 1961; Millward & Hopkins, 1998).

Diversity has been described as the management of differing needs for different groups of people that may be able to be more effective under alternative conditions such as telecommuting (Baruch, 2001). Feldman (1990), in his examination of telecommuting suggested that demographic differences were important in determining which workers would be more committed to an organization given the opportunity to have a career and still devote time to one's family responsibility. Empirical evidence shows that certain types of work arrangements (e.g., telecommuting) are related to demographic variables which are related to increased organizational commitment (Feldman & Doeringhaus, 1992). Initially, Feldman and Gainey (1997) proposed a general framework suggesting that the only demographic differences that would intensify or diminish the benefits of telecommuting were related to marital status and kinship. However, Mokhtarian (2002) showed that other demographic variables such as gender and education were positively related to the frequency of telecommuting.

The frequency of telecommuting may weaken the negative impact of perceived relational demography on commitment by making the differences less salient given the reduced physical, face-to-face contact. In other words, the impact of being reminded of visible differences diminishes as individuals telecommute in physically different

locations away from their dissimilar coworkers but this advantage is likely only a benefit up to a certain threshold. One could argue that the former statement implies that high-intensity telecommuters would be the most physically removed from face-to-face contact and therefore high-intensity telecommuters would display more commitment. However, the main effect relationship is not under investigation in this current research. The crux of this current research is not whether low- or high-intensity telecommuting leads directly to commitment but that a certain level of telecommuting (i.e., low-intensity telecommuting) lessens the negative feelings of being non-committal to an organization as a result of being different. As mentioned earlier, a crucial point to understanding whether low- or high-intensity telecommuting produces the most positive work outcomes is to understand that a threshold likely exists whereby the potential benefits of high-intensity telecommuting, such as minimization of differences, ceases to matter and possibly nullifies certain positive work outcomes. Essentially, high-intensity telecommuting may provide an opportunity to completely disengage from work as a result of limited physical face-to-face contact and therefore the better option may be low-intensity telecommuting.

Moreover, the frequency of telecommuting may weaken the negative impact of perceived relational demography on commitment by strengthening telecommuters' identification with a new in-group (i.e., telecommuters). Identification with a work unit such as telecommuters may increase an individual's commitment to the work unit (Ashforth & Mael, 1989) of telecommuters. Consistent with social identity and self-categorization theories (Tajfel & Turner, 1982) presented earlier, the demographically dissimilar employee now becomes a telecommuter and can identify themselves as an in-group member of similar others (i.e., telecommuters) thereby reducing the more salient

demographic attributes of the dissimilar on-site office individuals. As a dual benefit, this new category affiliation as an *in-group* member with other telecommuters may create a bond to other telecommuters while also maintaining an emotional bond to the organization for the benefit of telecommuting but only at levels of low-intensity telecommuting. Consequently, this emotional commitment develops because of telecommuting's perceived autonomy which has been found to be an antecedent to affective commitment (Colarelli et al., 1987). Therefore, telecommuters may perceive telecommuting as a benefit (Thatcher & Zhu, 2006) and the opportunity to foster an alternative identity may cause a psychological connection to the organization, especially from demographically different employees (Blatt, 2003). Specifically, low-intensity telecommuters may share a connection to both the organization through their face-to-face time in the office, as well as an association to this new in-group of telecommuters.

On the other hand, it could be argued that even if demographic differences become less salient because telecommuters develop a stronger psychological bond to other telecommuters there is also a psychological threshold related to telecommuting intensity that may predict lower-levels of affective commitment. Given the tremendous amount of time high-intensity telecommuters spend away from work, it is conceivable that high-intensity telecommuting minorities may also experience higher levels of resentment and isolation than low-intensity telecommuting employees or non-telecommuting workers without routine physical interaction with co-workers. However, some minority characteristics (e.g., younger and more educated) have been shown to be positively related to low-intensity telecommuters (Mokhtarian, 2002) and therefore, low-intensity telecommuting minorities may experience much lower levels of resentment and

isolation (Bailey & Kurland, 2002; Cooper & Kurland, 2002) than high-intensity telecommuting employees or non-telecommuting employees.

For the most part, visible demographic differences (i.e., gender, race, and age) are less noticeable when visibility is reduced by telecommuting (Weisband & Atwater, 1999; Barsness et al., 2005) as stereotyping triggers are softened through the use of some electronic media. Moreover, the telecommuters' emotional connection as a new in-group member with other telecommuters and the diminished face-to-face interaction with dissimilar coworkers is likely to be most favorable for low-intensity telecommuters. The thought is that low-intensity telecommuting is more favorable over high-intensity telecommuting or non-telecommuting for demographically dissimilar individuals given the positive implications for social identity with other telecommuters, realization of psychological contracts, and affective commitment to the organization. Low-intensity telecommuting may even provide the opportunity for demographically dissimilar telecommuters to still be visible for a large portion of the work week while also producing feelings of affective commitment to the organization, to coworkers (i., high-intensity telecommuters and non-telecommuters), and to the in-group of telecommuters leading to the following hypothesis:

> H3: Telecommuting intensity moderates the negative relationship between perceived relational demography and affective commitment such that this relationship will be weakest for low-intensity telecommuters than high-intensity telecommuters or non-telecommuters.

2.7 Procedural Justice Overview

The main focus of this section is to review the literature so as to provide support for the positive moderating effect of procedural justice on the relationship between telecommuting intensity and affective commitment. First, organizational justice is defined, followed by a short synopsis of the dimensions of organizational justice. Next, relevant literature on procedural justice and telecommuting intensity are described, in addition to a review of the literature regarding the relationship between procedural justice and affective commitment. Finally, this section concludes with a final hypothesis which argues that procedural justice enhances the relationship between telecommuting intensity and affective commitment as explained by equity theory (Adams, 1965).

2.7.1 Justice Theories

The concept of fairness is important in the workplace. Fairness or justice has been found to lead to positive work outcomes such as satisfaction, organizational citizenship behavior, and commitment (Moorman et al., 1993). On the other hand, perceptions of injustice are just as important to understand as perceptions of unfair treatment have been shown to lead to decreased performance, retaliation in the workplace, and turnover intentions (Skarlicki & Folger, 1997; Kanfer et al., 1987; Masterson et al., 2000). From a theoretical perspective, equity theory (Adams, 1965) has been used to evaluate the idea of fairness. Equity theory (Adams, 1965) posits that a comparison model is used to evaluate one's ratio of inputs and outputs against another individual's inputs and outputs. When individual's compared their inputs (e.g., workload, education, and experience) to the inputs of other individuals, then the expectation was that equivalent inputs deserved the same outputs (e.g., privileges, salary, and promotion opportunities). That is to say that

perceptions of unfairness resulted when inputs were not the same (i.e., lower or higher) but the rewards remain unchanged.

Although equity theory (Adams, 1965) was relevant to a variety of domains, an emergence of literature began to take shape that specifically addressed fairness within organizations termed organizational justice. Organizational justice theory (Greenberg, 1987) deals with how equity in the workplace impacts the attitudes and behaviors of individual workers and is an important concept given the growing diverse workforce population and the need to establish fair outcomes and consistent processes to achieve justice for all types of people. A meta-analytic study revealed that the attitudes and behaviors of individuals are not predisposed to any relational demographic characteristic and, for the most part, all people view justice in a similar way (Cohen-Charash & Spector, 2001). However, the perceptions of and reactions to fairness may be subjective and may be determined by a majority consensus as to what is deemed as fair for everyone (Cropanzano & Greenberg, 1997). Organizational justice is a multidimensional construct and most scholars ascribe three distinct dimensions to organizational justice – distributive, procedural, and interactional (Cohen-Charash & Spector, 2001) which are part of the subsequent discussion.

2.7.2 Dimensions of Organizational Justice

2.7.2.1 Distributive Justice

First, distributive justice deals with the perceived fairness of the distribution or allocation of resources (Adams, 1965; Leventhal, 1976). Typically, distributive justice perceptions develop based on three rules – equity, need, and or equality. Equity is the distribution of resources based on the same inputs and outputs regardless of the

individual. That is, individuals may consider a situation as equitable when all other individuals receive the same reward for the same amount of work. Consequently, some have argued that distributive justice is difficult to gauge because an individual has to be aware of what rewards are provided to other individuals in order to ascribe feelings of fairness or unfairness to the situation (Van den Bos et al., 1997). In the context of telecommuting, distributive justice perceptions may be regarded in several ways. For example, telecommuters may view their choice to telecommute as opposed to not telecommute as impactful to the distribution of other in-office rewards such as free coffee or other company freebies. In a similar fashion, non-telecommuters may feel distributive justice violations when they choose to remain an on-site worker but perceive that they are missing out on the distribution of other rewards associated with being a virtual employee such as autonomy.

Distributive justice based on need is usually due to personal or business needs and, in the context of telecommuting, need is usually the reason for its distribution (Thatcher & Bagger, 2011). Formal telecommuting policies are still absent from most American companies but informal telecommuting policies are typically more accepting and available to employees on an as-needed basis (Frolick et al, 1993) with supervisor approval. The equality rule refers to equal access for all individuals. Unfortunately, telecommuting depends on a number of factors including job suitability and performance and therefore telecommuting does not conform to support the equality rule. Consequently, this may explain why telecommuting has been found to be negatively related to distributive justice (Kurland & Egan, 1999).

2.7.2.2 Procedural Justice

Next, procedural justice is the *process* by which resources are applied and deals

heavily with consistency and accuracy in application of processes (Thibaut & Walker,

1975; Leventhal, 1980). "Procedural justice concerns the way that decisions are made

rather than the nature of those decisions themselves or their implications for the outcomes

received by different people" (Lind & Tyler 1988 p 5). In general, procedures are deemed

as fair based on four criteria, 1) consistent application of a process, 2) decision-making

authorities consider viewpoints from all impacted parties, 3) all parties involved have a

voice in the process, and 4) the process is transparent (Maiese, 2004). The thought behind

procedural justice is that fair processes that account for everyone's opinions are more

important to individuals than the actual outcome of the process, even if the outcome is

not favorable *per se* to them. Procedural justice conjures feelings of trust and loyalty

which makes it easier for individuals to voluntarily commit to an outcome and follow

rules. People can stay committed as long as the procedure used to arrive at the decision

was consistent (Leventhal, 1980) and included their voice (Cooper, Dyck, & Frolich,

1992). Research shows that individuals "react more favorably to procedures that give

them considerable freedom in communicating their views and arguments" (Lind & Tyler,

p 9).

2.7.2.3 Interactional Justice

Finally, interactional justice deals with the dignified nature of the treatment (Bies

& Moag, 1986) an individual receives when news is delivered. Originally, interactional

justice was thought to be part of procedural justice (Moorman, 1991); however, Bies and

Moag (1986) determined that quality of the process also contributed to the perception of

fairness. Moreover, the belief was that the quality of the process could be represented by

two conditions. The first condition, referred to as interpersonal justice, is the perception of whether people were treated with respect and dignity during a specific process. For example, violations of interpersonal justice may exist when a low-performing, untrustworthy worker accepts an opportunity to voluntarily telecommute but is told by one's supervisor that he/she cannot volunteer because the individual cannot be trusted and is a poor performing employee. The second condition, referred to as informational justice is the perception that individuals should be provided with timely and truthful information as a way to remedy perceptions of unfairness. Nonetheless, the focus of this current research is procedural justice as it was one of the dimensions of organizational justice that was found to be positively related to telecommuting (Kurland & Egan, 1999) and procedural justice has also been found to be more strongly related to affective commitment than distributive (Konovsky & Cropanzano, 1991) or interactional justice (Cohen-Charash & Spector, 2001).

2.7.3 Relevant Literature on Procedural Justice

The concept of procedural justice began in 1975 with an initial focus on the fairness of processes with respect to legal proceedings (Thibaut & Walker, 1975). However, the psychology of procedural justice has evolved since that time to include justice within organizations (Levanthal, 1980; Leventhal et al., 1980) and as previously mentioned, processes are considered fair when there is consistency, inclusion, "voice" (Folger, 1977; Lind & Tyler, 1988), and transparency in the process (Maiese, 2004). In order to evaluate the fairness of a process, research has shown that consistency in application of the rules governing a process can lead to a reduction in feelings of bias and unfair treatment (Leventhal, 1980). In the context of telecommuting, procedural justice violations may be minimized within a group when the allowance of telecommuting is

based on consistent rules such as job suitability and individual performance.

Additionally, individuals may judge procedural justice by whether or not they have

control over the information used to make decisions (i.e., process control) versus control

over the actual decisions (i.e., decision control) (Thibaut & Walker, 1975). For example,

seminal research by Thibaut and Walker (1975) found that disputants considered a

process fair as long as they could defend or present (i.e., voice) their case even if the

resulting decision did not favor or benefit them. Similarly, employees that have process

control more so than decision control over the allowance of telecommuting may exhibit

less jealously and resentment when others choose to telecommute that have met the

established criteria as a result of the employee's voice.

The literature on procedural justice as it relates to the guidelines highlighting the

importance of voice is plentiful (Greenberg 1990; Lind, 1990; Korsgaard et al., 1995;

Folger, 1977; Konovsky, 2000). In an international study, managers defined voice as

occurring under the presence of one of the following five conditions – 1) one-on-one

communication between employees and managers, 2) proactive feedback from employees

to managers, 3) collective feedback from employees to managers, 4) expression of views

without fear of retaliation and 5) expression of views that may lead to change (Wilkinson

et al., 2004). A more recent definition of voice "refers to how employees are able to have

a say regarding work activities and decision making issues within the organization in

which they work" (Wilkinson & Fay, 2011). In the context of telecommuting, "voice"

can be achieved by use of email and email fosters voice and satisfies the criteria for

procedural justice as email has been found to mediate the relationship between

telecommuting and procedural justice (Kurland & Egan, 1999). Additionally, we know

that the presence of voice has been found to increase trust (De Cremer et al., 2006) and trust has been shown to have a stronger relationship with procedural justice than any other dimension of organizational justice (Kurland & Egan, 1999; Konovsky & Pugh, 1994). Trust has been recommended as a prerequisite of telecommuting (Nilles, 1975) and both trust and telecommuting are positively related to commitment (Ruppel & Harrington, 2000; Hunton & Norman, 2010). Therefore, it is likely that all employees within work units that allow telecommuting may perceive fairness whether they choose to telecommute or not as long as they have a form of voice in the decision-making process (Romaine & Schmidt, 2009) leading to the resource of telecommuting.

Research that examines the impact of justice perceptions in relationships (i.e., telecommuters and non-telecommuters) is important especially considering the fact that, by its very nature, the structure of the traditional office environment is often anti-telecommuting. Kurland and Egan (1999) offered the first exploratory study to examine the relationship between telecommuting and justice proposing that a relationship exists because unlike non-telecommuters, telecommuters are physically absent from the office environment and therefore have more opportunities to experience injustice due to their absences (Kurland & Egan, 1999). Indeed, this same study found evidence that a positive relationship does exist between telecommuting and procedural justice, and even interactional justice. Again, reasoning that telecommuting and procedural justice perceptions are positively related partly due to email being considered an appropriate channel for "voice" and managers even admit that they communicate more regularly with telecommuters than non-telecommuters in order to make certain that they are kept abreast of status and any potential issues (Kurland & Egan, 1999).

More important than the fact that telecommuting has been found to be positively related to procedural justice is the thought that the frequency of telecommuting must also be related to procedural justice. Research in the area of work-family conflict has shown that work demands that interfere with time and obligations to one's family can be mitigated by high-intensity telecommuting (Golden et al., 2006) albeit at the expense of reducing one's commitment to the organization. However, procedural fairness has been found to moderate the negative relationship between work-family or work-life conflict such that high levels of procedural justice led to higher levels of organizational commitment (Siegel et al., 2005). This is an important finding that shows that as long as individuals perceive the process to be fair that organizational commitment may not be jeopardized. This current study wishes to further substantiate the notion that procedural fairness may also enhance more outcome favorability for all employees' affective commitment to the organization regardless of their frequency of telecommuting.

2.8 Procedural Justice Moderates the Relationship between Telecommuting Intensity and Affective Commitment

This current study proposes that as long as all employees (i.e., telecommuters and non-telecommuters) have a say (i.e.,"voice") in the telecommuting decision making process, then affective commitment will increase as predicted earlier in H2. As discussed previously, the thought it that low-intensity telecommuters are likely to experience more benefits (e.g., less interruptions and better social ties) than high-intensity telecommuters or non-telecommuters. Therefore, low-intensity telecommuters may be more affectively committed to the organization than high-intensity telecommuters or non-telecommuters. Additionally, in the presence of a procedurally just environment (i.e., consistency in application of the process, inclusion of viewpoints from all parties, the ability of all

parties to provide input or voice, and transparency of the process), the belief is that this relationship between telecommuting intensity and affective organizational commitment becomes even stronger. When employees have a choice whether or not to telecommute, equity theory (Adams, 1965) and procedural justice theory (Leventhal, 1980) would suggest that they are likely to experience stronger feelings of trust and loyalty. Therefore, any act of telecommuting, irrespective of the level, is done so based on the employee's free will, and not because of any pressures to engage or refrain from telecommuting. The spirit of choice that is reflected in a procedurally just environment where telecommuting intensity is a choice will strengthen the link between telecommuting and organizational commitment.

Once more, the psychology of procedural justice is that fair processes that account for everyone's voice are more valuable to individuals than the actual outcome of the process, even if the outcome is not favorable to the focal individual. When the outcome to telecommute is arrived at based on perceptions of a fair process, then feelings of trust and loyalty may follow which may make it easier for all individuals to voluntarily commit to the outcome without exhibiting feelings of jealousy and resentment. Furthermore, it is likely that all employees within a work unit that allows telecommuting may perceive fairness whether they choose to telecommute or not as long as they have a form of voice in the decision-making process (Romaine & Schmidt, 2009) leading to the outcome of telecommuting. To reiterate, as long as individuals perceive the process to be fair, then organizational commitment may not be jeopardized and the relationship between telecommuting intensity and affective commitment will be positive for all employees. Therefore, affective commitment for all employees (i.e., telecommuters and

non-telecommuters) may be enhanced through procedurally fair processes regardless of the frequency of telecommuting and therefore, the following hypothesis is presented:

H4: Procedural justice moderates the positive relationship between telecommuting intensity and affective commitment such that this relationship will be stronger as perceptions of procedural justice increase.

Chapter 3 – RESEARCH METHODOLOGY

3.1 Research Methodology Overview

　　The subsequent sections in this chapter provide an outline of the research method

for testing the hypothesized relationships in this current study. First, an overview of the

survey participants are presented. Next, the procedure is discussed, followed by a

description of the measures. Finally, a brief overview of the methods used for data

analyses are presented.

3.1.1 Survey Participants

　　This current study used an online questionnaire based on tools from Qualtrics.

Qualtrics provides online survey software that allows researchers to build and administer

surveys over the Internet for online data collection. Using previous business research as a

guide (DeCelles et al., 2012; Long et al., 2011), the sample for this current research was

drawn from Qualtrics panel members[3]. Researchers may use their own sample population

or may leverage a panel of individuals from Qualtrics; however in either scenario, the

survey instrument is designed by the researcher.

　　The use of Qualtrics panel members in academic research has grown in recent

years with studies (e.g., DeCelles et al., 2012; Long et al., 2011) being published in high

quality journals. There are advantages and disadvantages to using Qualtrics panels as

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[3] www.qualtrics.com/panel-management/

 summarized in Table 2 below. First, using Qualtrics panels allows the researcher's sample to be specifically recruited for better alignment with study variables and better census representative sampling (Bushman et al., 2012). Additionally, the recruited panel is likely familiar with the study variables given the pre-screening filters which may lead to better quality responses. Next, as a way to mitigate common methods variance (CMV), Qualtrics allows researchers to implement a time delay (Ostroff et al., 2002; Podsakoff et al., 2003) between measuring the predictor and criterion variables. CMV is considered a serious problem because it yields systematic error variance amongst shared variables as a result of the same method or source being used or both (Podsakoff et al., 2012). This time delay technique is beneficial to minimizing CMV as it reduces biases caused by previous responses but may also increase risk of participant attrition, delay for relationships, and construct stability (Podsakoff et al., 2012). Finally, as it relates specifically to this current research, the use of multi-company sources in the sample may offer more variability with respect to procedural fairness, as opposed to a single-company source which may limit insight to only the perceived fairness of telecommuting policies within a single organization. Furthermore, using a multi-company source may provide a more diverse sample to measure perceived demographic differences which may not be as plentiful when using a single-company source, especially if the percent of diversity is low.

Notwithstanding the myriad of benefits, there are also a few disadvantages to using Qualtrics panels such as the lack of random sampling (Widarsyah, 2013) and non-response bias (Long et al., 2011). However, the lack of random sampling can be remedied by census representative sampling (Bushman, 2012) and non-response bias can be minimized by adding pre-screening questions. Essentially, the benefits of using Qualtrics

panels far outweighed the detriments and as such this current study leveraged Qualtrics

panel members.

Table 2. Advantages and Disadvantages of using Qualtrics Panels

Advantages	Disadvantages	Remedies
The sample is specifically recruited (i.e., opted-in).	The sample may not be representative of the general population.	• Use quota management (i.e., maintaining a threshold for valid responses) • Use click balancing (i.e., census representative sampling)
Prequalified participants offer a greater likelihood of context familiarity.	Non-response bias may increase if survey isn't designed properly.	• Add important prescreening questions and review screen-out data.
Use of a multi-source company sample.	Inability to capture single-company data.	• May offer more variability with multi-company sample for certain measures perceptual measures.
Use of time delays.	Time delays may increase participant attrition, delay for relationships, and construct stability.	• Obtain measures of predictor and criterion variables at different times (temporal/time delay) to offset short-term memory.
Early data preview without invalidating results.	N/A	• Use pause sampling.

For this current study, Qualtrics guaranteed and delivered 201 completed

responses which meets the recommended 15:1 or 20:1 ratio of observations to variables

(Hair et al., 2010). This current study used a total of seven predictor variables. As such,

the current study required a sample size of between 105 to 140 completed responses.

Moreover, an a *priori* power analysis was conducted and the minimum, acceptable

sample size was 129 participants based on an alpha of .05, an effect size of .15, and a desired statistical power level of .90.

Participants provided self-reported data to an online survey developed from well-known scales on perceived relational demography, affective commitment, telecommuting intensity, and procedural justice (Riordan, 1997; Meyer's et al., 1993; Fritz's et al., 1998; and Colquitt, 2001) (Appendix A). Attention filters were used to make sure that respondents were actually reading and responding thoughtfully to the questions. Qualtrics allows researchers to use three main quality checks such as validation, attention filters, and survey durations for measuring respondents' level of attention. Validation quality checks force respondents to answer questions before proceeding. The technique of introducing unrelated questions is called attention filters which helps to ensure that respondents are not treating every question the same. The survey duration quality check is the use of an established time threshold that would likely indicate whether respondents actually read the survey questions. Qualtrics uses one-third of the total time forecasted to complete the survey which is based on an industry standard amongst Qualtrics' peers. For example, this current study's survey has been pretested to complete within 10 – 15 minutes. Therefore, Qualtrics will drop respondents that complete the survey in less than 5 minutes (i.e., one-third of 15 minutes). This current study used both validation and survey duration quality checks.

3.1.2 Procedure

As a way to minimize Common Methods Variance, this current study employed a time delay which was managed by Qualtrics. Therefore, this current study was administered as one survey with two parts although it will be described henceforth as Survey 1 and Survey 2. Survey 1 was attached directly to the prescreening questions and

Survey 2 followed 1 week (i.e., 7 calendar days) later after completion of Survey 1 via an email invitation from Qualtrics to the respondents requesting completion. Given concerns over participant attrition, Qualtrics initially oversampled the random population. Furthermore, participant attrition was minimized because Qualtrics panel members are only compensated for completed surveys. At a minimum, the expectation was that a response rate of greater than the acceptable 26 percent for Internet research (Cook et al, 2000) would be achieved as shown by other recent research (Long et al., 2011). The response rate for Survey 1 was sixty-four percent and the response rate from Survey 2 was thirty-one percent. The actual survey instrument was designed and loaded to the Qualtrics survey software by the researcher of this current study.

To start, Qualtrics randomly solicited their panel members based on one question related to country culture (i.e., Are you currently employed by a company with headquarters in the United States of America?). Qualified panel members must be currently employed by a company with headquarters or home offices in the United States as country culture should be a key part of any research on telecommuting (Raghuram et al., 2001). Respondents answering 'Yes' to the country culture prescreening question were sent to a secondary set of prescreening questions that functioned as categorize respondent information.

This current study used filters for firm size and collected categorical information for telecommuting intensity and demographics. Respondents that work with a company with less than 100 employees were filtered out although firm size has shown mixed results with respect to its relationship with telecommuting. Huws et al. (1990) found that telecommuting adoption is more likely to occur in large firms because large companies

have more access to resources to be able to implement telecommuting programs effectively. However, other scholars (Thomaskovic-Devey & Risman, 1993; Mayo et al., 2009) have found that telecommuting is most likely to be viewed positively by small firms because small firms tend to be more flexible and open to new experiences such as telecommuting. In this current study, firm size was important because recent research indicated that a typical telecommuter is employed by a company with more than 100 employees (Lister & Harnish, 2011). As such, panel members were screened out if their company size was less than 100 employees. The remaining qualified respondents were asked to answer a set of questions on telecommuting intensity and demographics. Respondents' answers to these questions were carried over to the end of the survey. For example, a 40-year old Asian female with a graduate degree that happens to work from home 3 – 4 days per week was mapped to the same respondent in Survey 1 and Survey 2 to keep the responses to all survey responses linked together by subject.

Immediately upon completion of the prescreening questions ending with the collection of demographic information (e.g., age, gender, race, and education), respondents were presented with an informed consent form prior to taking the actual survey (Appendix A). For this current study, Qualtrics provided non-response information prior to Survey 1 and Survey 2 but not before or during either the Qualtrics or researcher's prescreening questions. Non-response bias was checked for only those respondents that were qualified to take the actual survey. Given this fact, Qualtrics oversampled their panel members such that 201 respondents provided "high quality" completed survey data which was well above the required minimum of 129 respondents.

Next, respondents moving into Survey 1 began by answering a question related to their perception of the percent of race and gender diversity (Cappelli & Keller, 2013) within the respondents' current organizational work unit. The belief was that the sample must have enough gender and race diversity to test the hypothesized relationship stated in H1 (H1: Perceived relational demography is negatively related to affective commitment for individuals demographically dissimilar to others in their work unit). Survey 1 followed with questions that offered deeper insights about firm size and telecommuting intensity as a factor of hours instead of days per week. Survey 1 ended with questions related to perceived relational demography and corporate culture (Hoang et al., 2008) followed by a 1 week (i.e., 7 calendar days) time delay managed by Qualtrics prior to sending the email invitation with the hyperlink requesting completion of Survey 2. Qualtrics tracked the respondents' email address but email addresses are not available to the researcher.

Finally, respondents that accepted the emailed invitation from Qualtrics to complete Survey 2, answered questions related to items from affective commitment and procedural justice scales (Riordan, 1997; Meyer's et al., 1993) (Appendix A). The process worked such that the random sample of 2,500 people led to 2,287 potential respondents. First, out of 2,500 people, only 2,287 people had jobs based in the United States of America. Next, from those 2,287 people, only 1,262 people meet the prescreening requirements and furthermore, only 644 people completed Survey 1. Finally, out of the 644 people that completed Survey 1, only 201 people completed Survey 2. Qualtrics guaranteed balanced quota groups (i.e., low-, high-intensity, and non-telecommuters).

Figure 2 below provides a conceptual view of how the procedure worked and Figure 3 provides a high-level layout of the survey order.
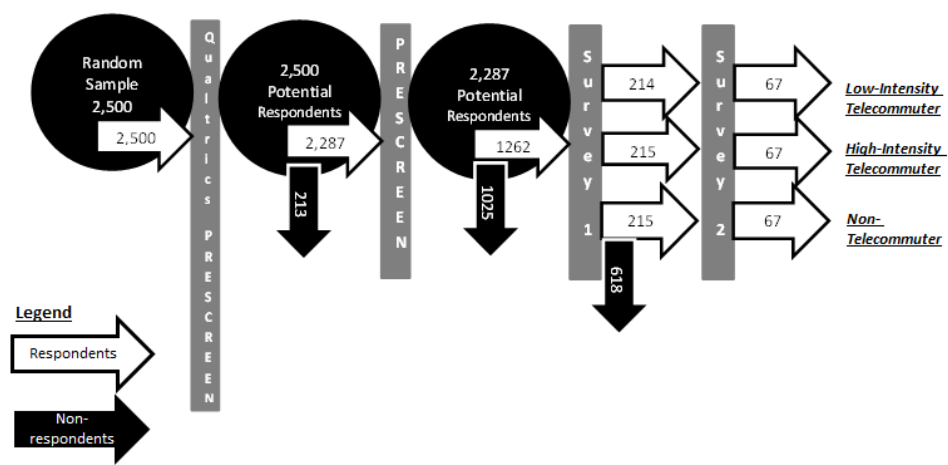
Figure 2. Conceptual View of Procedure

Figure 3. Layout of Survey Order

3.1.3 Measures

3.1.3.1 Independent Construct
Perceived Relational Demography

Actual computed measures, as opposed to perceptual measures, of relational demography have been promoted in the literature, as the thought has been that a greater level of accuracy could be obtained from respondents that self-report their own demographics instead of their perceptions of how similar they are to others. However, this notion has been contradicted as it relates to direct work outcomes such as organizational commitment because perceptions drive one's reality. The most salient literature on the usefulness of *perceived* relational demography comes from Riordan (1997), Riordan and Shore (1997), Clark et al. (2002), and Clark et al. (2003) which collectively indicate that perceived relational demography is a valid way to measure actual relational demography and, if used, is an extension of the original research on perceived relational demography (Kirchmeyer, 1995). Moreover, the strength of perceived relational demography is confirmed given the small amount of variance found in studies using actual relational demography versus perceived relational demography (Riordan, 2000).

In this current study, perceived relational demography was measured using the most commonly studied, visible demographic variables – race, gender, and age. Additionally, non-visible demographic variables such as education and company tenure were also included so that relevant conclusions could be drawn. Participants were asked to evaluate how similar individuals in their workgroup were to them on each demographic variable using a modified 5-point scale from Highly Similar to Not Similar

at All. To expound, survey respondents that selected Not Similar at All were considered

to have the greatest amount of dissimilarity while respondents that selected Highly

Similar were considered to have the least amount of dissimilarity. The scale used in this

current study was extracted from the scale for perceived relational diversity but only

specific to objective demographics (Clark et al., 2002). In a subsequent question,

individuals were also asked to indicate the number of individuals in their immediate work

unit. This current study showed an acceptable threshold of internal consistency, as

determined by a Cronbach's alpha of 0.740.

3.1.3.2 Moderators
Telecommuting Intensity

Telecommuting intensity was measured using Fritz's et al. (1998) measure where

all participants were asked to describe their current work situation as follows: In a typical

week, how much time do you spend working at home instead of coming into an office?

The answer choices range from a) I do not work in a home office , b) Less than 1 day per

week total, c) 1 – 2 days per week, d) 3 – 4 day per week, or e) More than 4 days per

week. Respondents that best described their work situation by selecting a) were classified

as non-telecommuters. Respondents that best described their work situation by choosing

either b) or c) were classified as low-intensity telecommuters (Gajendran & Harrison,

2007). Finally, respondents that described their work situation by selecting d) or e) were

considered high-intensity telecommuters (Gajendran & Harrison, 2007). Additionally, for

deeper insights, the extent of telecommuting (Golden & Veiga, 2005) was requested

which represents the actual hours worked at home during a given week.

<u>Procedural Justice</u>

The procedural justice items focus on formal procedures given its assessment of the degree to which employee voice is part of the process. As it relates to this current study, telecommuting is voluntary and all workers in a work unit with similar job characteristics and responsibilities have an option to telecommute, if desired. Procedural justice was measured using Colquitt's (2001) seven item, 5-point scale with anchors from 1 = Strongly Disagree to 5 = Strongly Agree. For example, the statement "The following items refer to the procedures used to arrive at telecommuting in your workgroup" precedes each item such that the respondent is focused on answering questions about procedures related to telecommuting. Sample items include, "Are those procedures applied consistently" and "Are those procedures free of bias?". This current study showed a high-level of internal consistency, as determined by a Cronbach's alpha of 0.898.

3.1.3.3 Dependent Construct
Affective Commitment

Affective commitment was measured using Meyer's et al. (1993) revised three component model given that it captures all three dimensions of organizational commitment, specifically affective commitment, which is not captured in Mowday et al. (1982). High scores lead to perceived levels of high commitment in a given dimension. The affective commitment component contains 6 items and was measured on a 7-point scale from 1 = Strongly Disagree to 7 = Strongly Agree. Sample items include, "I would be very happy to spend the rest of my career with this company and I really feel as if this company's problems are my own". The median coefficient alpha reliability reported for this scale is 0.86. This current study showed a high-level of internal consistency, as determined by a Cronbach's alpha of 0.917.

3.1.3.4 Control Variables

Slightly different than control variables, this study leveraged a filtering mechanism employed by Qualtrics. Questions pertaining to country culture and firm size were part of the pre-survey questions and were used as filters to screen-out participants based on the context of this current study. Again, qualified participants must be employed by a US based company with 100 or more total employees to minimize differences for country culture and firm size. Race diversity and gender diversity (i.e., Percent of diversity) were the only true control variables used in this study. Percent of diversity was measured by respondents answers to the question of their perception of the percent of race (i.e., non-white workers) and gender diversity within their immediate work unit (i.e., individuals reporting to the same supervisor) whereby 1 equals less than 50%, 4 equals 50% to 75%, and 5 equals more than 75%. Normally, percent of diversity is not used as a control variable for relational demography studies given that the collection of data is typically from a single-company which allows for more control over the selection of a single-company with diverse work units. In an effort to increase the likelihood that respondents in this multi-company study would be part of a diverse work unit, the idea was to more closely account for the chance that differences would exist by controlling for the percent of diversity within the respondents work unit.

3.1.4 Methods for Data Analysis

The first step in the upcoming section (Chapter 4) was to confirm that perceived relational demography was negatively related to affective commitment. To state it another way, as perceived differences in race, gender, and age increase, then affective commitment decreases (H1). This direct relationship, Hypothesis 1, was tested using multiple regression. In a similar manner, the direct relationship between telecommuting

intensity and affective commitment (H2) was tested using multiple regression, as well.

The two moderated hypotheses (H3 and H4) were tested in separate hierarchical multiple

regression analyses examining the interactive effects of telecommuting intensity on the

direct relationship studied in Hypothesis 1 and procedural justice on the direct

relationship studied in Hypothesis 2. Hypotheses were tested using hierarchical

regression following Baron and Kenny's (1986) technique. An outline of the data

analysis is presented in Table 3 below.

Table 3. Data Analysis Outline

Hypothesis	Method	Relationship Type	Conceptual Model
1	Regression analysis with Perceived Relational Demography and Affective Commitment	Direct	pRD ⟶ AC
2	Regression analysis with Telecommuting Intensity and Affective Commitment	Direct	TCint ⟶ AC
3	Hierarchical Regression analysis with Telecommuting Intensity on the relationship between Perceived Relational Demography and Affective Commitment	Moderated	pRD ⟶ AC ↑ TCint
4	Hierarchical Regression analysis with Procedural Justice on the relationship between Telecommuting Intensity and Affective Commitment	Moderated	TCint ⟶ AC ↑ PJ

IBM's Statistical Package for Social Sciences (SPSS) software was used to

perform data analysis and Analysis of Moment Structures (AMOS) was used to test

construct validity using Confirmatory Factor Analysis (CFA). Cronbach's alpha was

analyzed to ensure that each scale item was reliable as Cronbach's alpha measures how

well scale items actually refer to its given construct (Cortina, 1993). In addition to

multiple regression, factor loadings and correlations were examined to determine the

relationships between constructs. Furthermore, descriptive statistics were examined along with regression analyses of the constructs of this current study.

In summary, chapter 3 outlined the research methodology for this current study. All questions administered in the survey followed the policies and procedures as governed by the Institutional Review Board (IRB) of Kennesaw State University as it relates to human participants. IRB certification was approved prior to releasing the survey through Qualtrics for data collection. The remaining chapters will step through data analyses and findings of the current study.

Chapter 4 - DATA ANALYSIS AND FINDINGS

4.1 Data Analysis and Findings Overview

   The subsequent sections in this chapter provide an overview of the data analysis.

First, descriptive statistics and correlations are reviewed. Next, the model fit statistics are

presented and discussed. Finally, the steps required for the regression analysis are

presented along with a summary of the results.

4.1 Descriptive Statistics and Correlations

   As stated earlier, this study was conducted as one survey but administered in two

parts (i.e., waves) to the same individuals using a seven calendar day time delay between

the end of wave 1 and the start of wave 2. Wave 1 included questions 1 through 16 and

wave 2 comprised questions 17 through 20. Wave 1 was sent to 1,000 Qualtrics panel

members and 644 panel members completed wave 1 for a response rate of 64.4 percent.

Wave 2 was sent to those same644 panel members that completed wave 1 and 201 of

these panel members completed wave 2 (N = 201) for a response rate of 31.2 percent.

   The initial step in the data analysis process was to review the descriptive statistics.

Of the 201 respondents, 90 (45%) were male, and 111 (55%) were female; 2 (1%) were

American Indian or Alaska Native, 12 (6%) were Asian, 20 (10%) were Black or African

American, 2 (1%) were Native Hawaiian or Other Pacific Islander, 161 (80%) were

White, and 4 (2%) identified as being part of two or more races. The demographic profile of the respondents closely resembles that of the current US population; however this study does not separate Hispanic/Spanish racial category from White. The respondents ranged in age from 22 to 76 years old with an average age of 43 and a median age of 42 years. The majority of the respondents possess a 2- or 4-year college degree where 13 (6%) earned a high school diploma, 24 (12%) had some college, 82 (41%) attained a college degree, 52 (26%) achieved a graduate degree, 18 (9%) participated in post graduate work, and 12 (6%) achieved a post graduate degree.

All respondents were required to work for a US based company with more than 100 employees. Of the 201 respondents, 18 (10%) worked in a firm with 100 – 249 employees, 27 (13%) worked in a firm with 250 – 499 employees, 25 (12%) worked in a firm with 500 – 999 employees, 35 (17%) worked in a firm with 1,000 – 2,499 employees, 42 (21%) worked in a firm with 2,500 – 4,999 employees, 17 (9%) worked in a firm with 5,000 – 9,999 employees, and 37 (18%) worked in a firm with 10,000 or more employees; the tenure ranged from 1 to 53 years with an average of 11 years and a median tenure of 8. The number of individuals per workgroup was between 2 and 325 with an average of 201 and a median of 10. Quota requirements were implemented to insure that an equal number of telecommuters responded. Non-telecommuters, low-intensity telecommuters, and high-intensity telecommuters were each represented by 67 (33%) respondents with all respondents indicating that the choice of whether or not to telecommute is theirs.

A large part of this study was heavily dependent on perceptions of dissimilarity (relational demography). The current sample may prove to be challenging in that a

majority of the respondents indicated that they believe themselves to be *similar to* and *not different from* other individuals in their workgroup based on factors such as age, race, gender, education, and tenure. For example, on the 5-pt perceived relational demography question in this study, where 1 represented highly similar and 5 represented highly dissimilar, the average mean across all 5 items was 2.3 indicating that the respondents considered themselves to be similar to others in their work unit on the basis of age, race, gender, education, and tenure. Table 4 presents means, standard deviations, and correlations for all measures.

Table 4. Means, Standard Deviation, and Correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1. Race Diversity (Control)	2.55	1.63									
2. Gender Diversity (Control)	3.18	1.61	.371**								
3. Perceived Relational Demography	2.29	.732	-.193**	-.155*							
4. Telecommuting Intensity None	.333	.473	-.076	.055	.154*						
5. Telecommuting Intensity Low	.333	.473	-.218**	-.149*	.200**	-.500**					
6. Telecommuting Intensity High	.333	.473	.294**	.094	-.354**	-.500**	-.500**				
7. Telecommuting Intensity	2.00	.818	.214**	.023	-.293**	-.866**	.000	.866**			
8. Procedural Justice	3.84	.758	.226**	.062	-.331**	-.257**	-.090	.347**	.349**		
9. Affective Commitment	5.32	1.23	.184**	.130	-.232**	-.113	-.196**	.309**	.243**	.688**	

Note: N = 201, Male = 1, Percent Non-White (i.e., Race Diversity) or Percent Diversity Non-female (i.e., Gender Diversity (Less than 50% = 1, Between 50% - 75% = 4, More than 75%=5), Perceived Relational Demography (Age, Race, Gender, Education, and Tenure) where dissimilarity is a maximum value of 5.

*Correlation is significant at the 0.05 level (2-tailed). **Correlation is significant at the 0.01 level 2-tailed

The Pearson's correlation matrix shows that 27 of the 36 correlations are significant and 3 correlations (telecommuting intensity to no telecommuting, telecommuting intensity to high intensity telecommuting, and procedural justice to affective commitment) have an extremely strong association (i.e., values greater than .5) (Hair et al., 2010). The high degree of multicollinearity between the variable of telecommuting intensity (variable 7) and the two independent levels of telecommuting intensity (variables 4 and 6) can be explained because telecommuting intensity (variable 7) is a summated variable that represents the composite of variables 4, 5, and 6. The dependent variable, affective commitment, is significantly correlated with race diversity, perceived relational demography, telecommuting intensity (both high and low), and procedural justice. Some of the coefficients have a negative value indicating an inverse association. For example, the direction of the relationship is negative between affective commitment and relational demography which indicates that higher levels of dissimilarity are associated with lower levels of affective commitment and vice versa.

4.2 Confirmatory Factor Analysis

Next, in order to validate the measurement model, a Confirmatory Factor Analysis (CFA) was performed. The factor loadings and squared multiple correlations for the CFA are shown in Table 5. The model fit statistics are shown in Table 6 for the CFA.

Table 5. CFA Factor Loadings and Squared Multiple Correlations

	Factor Loadings (Standard Regression Weights)			Squared Multiple Correlations (Item Reliabilities)
	RD	AD	PJ	
RD1 (Age) Q14_1	0.651			0.423
RD2 (Race) Q14_2	0.513			0.263
RD3 (Gender) Q14_3	0.434			0.189
RD4 (Education) Q14_4	0.624			0.390
RD5 (Tenure) Q14_5	0.784			0.614
AC1 Q17_1		0.711		0.506
AC2 Q17_2		0.778		0.605
AC3 Q17_3		0.805		0.648
AC4 Q17_4		0.865		0.748
AC5 Q17_5		0.825		0.680
AC6 Q17_6		0.862		0.743
PJ1 Q18_1			0.715	0.512
PJ2 Q18_2			0.739	0.546
PJ3 Q18_3			0.781	0.610
PJ4 Q18_4			0.776	0.602
PJ5 Q18_5			0.797	0.635
PJ6 Q18_6			0.700	0.491
PJ7 Q18_7			0.731	0.535

The three-factor CFA model[4] showed that all the standardized loadings were statistically significant providing some indication of convergent validity. All factor loadings fell above the minimum threshold of .5 except one (i.e., RD3 (Gender) or Q14_3); however, when the item (RD3) was removed from the model, the fit became worse as judged by a negative change in the Normed Chi Square from 1.867 to 1.961 and therefore, the decision was made to keep RD3 in the model. Additionally, in order to maintain content validity, the other three relational demography loadings below the .7 threshold (RD1 Age, RD2 Race and RD4 Education) will remain in the model because they are above the minimum acceptable threshold of .5 (Hair et al., 2010). Furthermore, it could be argued that, conceptually, each one of the perceived relational demography items may not need to have a strong association with Factor 1 (i.e., Perceived Relational Demography) because each item on its own merits, or a combination thereof, can produce a strong connection with perceptions of dissimilarity depending on the perceptions of the focal person. For example, demographic dissimilarity in race and gender can elicit the same negative emotions as dissimilarity in age based solely on the interpretations of the focal individual. Finally, the perceptions of dissimilarity were relatively low for this study with many respondents indicating that they were most different from others in tenure than in any other category which may account for the high loading of tenure over the other four items. Therefore, the five items that shape the relational demography construct would not necessarily load together because each of the five items are perceptually different and independent of one another. While they may coexist in one's

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[4] Telecommuting Intensity was not modeled because it is a single-item measure which should not be considered during a CFA which requires constructs to be represented by multiple items.

work setting having an additive effect on the amount of relational dissimilarity one feels, they do not necessarily have to load together.

The next part of the CFA, included investigation of construct reliability, standardized residuals, and modification indices. The item reliabilities shown in Table 4 are mostly good with a few marginal measures and one poor measure (i.e., RD3 (Gender) or Q14_3) of reliability. Nevertheless, construct reliability is good with perceived relational demography calculated at 0.74, affective commitment at 0.92, and procedural justice at 0.90. Next, the standardized residuals were all above the threshold of |4.0|. The largest residual was 2.466 for the covariance between Q18_1 and Q17_1. No action was taken given the overall low standardized residuals. Finally, the highest modification index was reported at 16.723 for the value of the covariance between the error terms for Q18_1 and Q17_1. Since the covariance is not unusually high and given the high loadings for these two items, the decision was made to keep both items in the model. In general, the CFA model supports the measurement model with good convergent validity as confirmed by eigenvalues above 1 (e.g., RD = 1.879, AC = 3.931, and PJ = 3.929). Furthermore, the CFA model fit showed respectable fit indices (e.g., Comparative Fit Index (CFI) = 0.941 and Root Mean Square Error Approximation (RMSEA) = 0.066).

Table 6. Model Fit Statistics

Measurements	CFA Model Fit
Chi – Square (χ2)	246.438
Degrees of Freedom	132
Probability Level	.000
Normed Chi-Square (CMIN/DF)	1.867
Goodness-of-Fit (GFI)	0.882
Root Mean Square Error Approximation (RMSEA)	0.066
Comparative Fit Index (CFI)	0.941
p of Close Fit (PCLOSE)	0.023
Adjusted Goodness-of-Fit Index (AGFI)	0.847

4.3 Regression Analysis

Prior to entering data for the regression steps, the categorical variable, telecommuting intensity, was recoded into three distinct categories with the category of non-telecommuting intensity as the initial reference category. Additionally, the two control variables, race diversity (i.e., Percent Non-white Diversity) and gender diversity (i.e., Percent Female Diversity) were entered into the regression equation. Although race diversity was significant (p≤ .10) and gender diversity was not significant, a decision was made to keep race diversity as a control variable given the significant correlation between race diversity and relational demography.

As shown in table 7, a 6-step regression model was entered into IBM SPSS. First, the two control variables were entered as step 1. Next, the direct relationships, hypotheses 1 and 2, were entered as steps 2 and 3, respectively. Hypothesis 1 tested the relationship

between perceived relational demography and affective commitment. Hypothesis 2 tested

the relationship between telecommuting intensity and affective commitment but

specifically for the levels of telecommuting intensity (i.e., none, low, and high). Next, the

interaction term, telecommuting intensity, was tested as a moderator for the relationship

between perceived relational demography and affective commitment as step 4. Step 4

tested hypothesis 3; however the recoded variables for telecommuting intensity were used

to determine which level of telecommuting intensity would be relevant. Step 5 required

entry of procedural justice into the regression model and finally, step 6 tested procedural

justice as a moderator for the relationship between telecommuting intensity and affective

commitment. Step 6 tested hypothesis 4. The changes in R-squared, the F statistic, and

the standardized regression are presented in each step in Table 7.

Table 7. Results of Regression Analysis

Predictor	Step 1 CV	Step 2 (H1) PRD->AC	Step 3 (H2) TC->AC	Step4 (H3) PRD*TC->AC	Step 5 (H4) PJ->AC	Step 6 (H4) TC*PJ->AC
Step 1						
Race Diversity	.157 (.056)**	.126 (.056)*	.064 (.056)	.061 (.057)	-.029 (.044)	-.024 (.044)
Gender Diversity	.072 (.057)	.053 (.056)	.061 (.056)	.053 (.056)	.079 (.043)	.082 (.043)
Step 2 (H1)						
Perceived Relational Demography	-	-.200 (.117)***	-.125 (.120)**	.029 (.339)	.107 (.258)	.079 (.259)
Step 3 (H2)						
Low Telecommuting Intensity			-.037 (202)	.082 (.432)	-.067 (.330)	-.336 (.612)
High Telecommuting Intensity	-	-	.259 (.219)***	.356 (.381)**	.194 (.291)*	-.115 (.658)
Step 4 (H3)						
Perceived Relational Demography x Telecommuting Intensity	-	-	-	-.215 (.158)	-.103 (.120)	-.048 (.122)
Step 5						
Procedural Justice	-	-	-	-	.680 (.092)***	.496 (.238)***
Step 6 (H4)						
Procedural Justice x Telecommuting Intensity	-	-	-	-	-	.553 (.127)*
R^2	.038*	.076***	.124***	.127	.499***	.504*
ΔR^2	.038*	.038***	.048***	.003	0.372***	.005*
F	3.926*	5.421***	5.531***	4.711***	27.434***	24.339***
ΔF	3.926*	8.128***	5.337***	.660	143.076***	1.836*

Note: Values shown are the standardized coefficients with standard errors in parentheses.

*$p \leq .10$

**$p \leq .05$

***$p \leq .01$

4.3.1 Findings

  Hypothesis 1, which predicted that perceived relational demography is negatively related to affective commitment for individuals demographically dissimilar to others in their work unit, was supported. The more demographically dissimilar an individual perceives themselves to be to others in their work unit the less affectively committed they are to their organization (β = -.200, p = .005). Hypothesis 2, which predicted that the relationship between telecommuting intensity and affective commitment is strongest for low-intensity telecommuters than for high-intensity telecommuters or non-telecommuters, was not supported. Essentially, the belief was that working 1 or 2 days per week from home would increase a telecommuters emotional attachment to their organization over somebody that telecommutes more than 2 days per week from home or not at all because low-intensity telecommuters would form an emotional bond with both high-intensity telecommuters and non-telecommuters which would possibly lead to better social ties, more loyalty, and more trust. Contrary to the hypothesis, high-intensity telecommuting was significantly related to affective commitment (β = .259, p = .003) and therefore H2 is considered partially supported. These results imply that gains to affective commitment may not level-off or diminish as telecommuting intensity increases. Hypothesis 3, which predicted a weaker relationship for low-intensity telecommuters than for high-intensity telecommuters or non-telecommuters as a moderator for the relationship between demographically dissimilar individuals and affective commitment, was not supported. To help better understand the reason for the lack of support for H3, a Bonferroni correction was performed for multiple comparisons to identify any significant

differences between the means. This post-hoc analysis showed no significant difference between the means of those individuals that do not telecommute and those that telecommute 1 or 2 days per week from home (low-intensity telecommuters). There was a significant difference between the means for low-intensity telecommuters and high-intensity telecommuters (working from home more than 2 days per week) and an even more significant difference between the means for non- telecommuters and high-intensity telecommuters. Finally, Hypothesis 4, predicted that procedural justice moderates the positive relationship between telecommuting intensity and affective commitment such that this relationship will be stronger for all employees (i.e., telecommuters (low- or high-intensity) or non-telecommuters) as perceptions of procedural justice increase, was significant and therefore supported (β = .533, p = .063). This means that the greater employees perceptions of fair processes used to determine telecommuting than the stronger will be all employees emotional attachment to the organization regardless of the frequency of telecommuting or even whether individuals choose to telecommute at all. An interesting result of the data analysis, although not part of the hypothesis in this current study, showed that procedural justice significantly predicts affective commitment (β = .680, p = .000). A summary of the results for each hypothesis is listed in Table 8.

Table 8. Summary of Findings

	Hypothesis	Results
H1	Perceived relational demography is negatively related to affective commitment for individuals demographically dissimilar to others in their work unit.	Supported
H2	The relationship between telecommuting intensity and affective commitment is strongest for low-intensity telecommuters than for high-intensity telecommuters or non-telecommuters.	Partial Support
H3	Telecommuting intensity moderates the negative relationship between perceived relational demography and affective commitment such that this relationship will be weakest for low-intensity telecommuters than high-intensity telecommuters or non-telecommuters.	Not Supported
H4	Procedural justice moderates the positive relationship between telecommuting intensity and affective commitment such that this relationship will be stronger as perceptions of procedural justice increase.	Supported

To more fully understand the interaction (H4) that was significant, separate regression lines were plotted using one standard deviation above and one standard deviation below the mean for the independent and moderator variables. Based on the continuous moderator, procedural justice (Aiken & West, 1991), the two-way interaction proposes that telecommuting intensity is more strongly related to affective commitment when procedural justice is high and when telecommuting intensity is high as shown in

Figure 4. Slightly different than hypothesis (H4), which asserted that as procedural justice

increased so would the strength of the relationship between telecommuting intensity and

affective commitment, Figure 4 implies the relationship between telecommuting intensity

and affective commitment is strongest for high-intensity telecommuters as procedures for

telecommuting are agreed to by all individuals in their work unit.
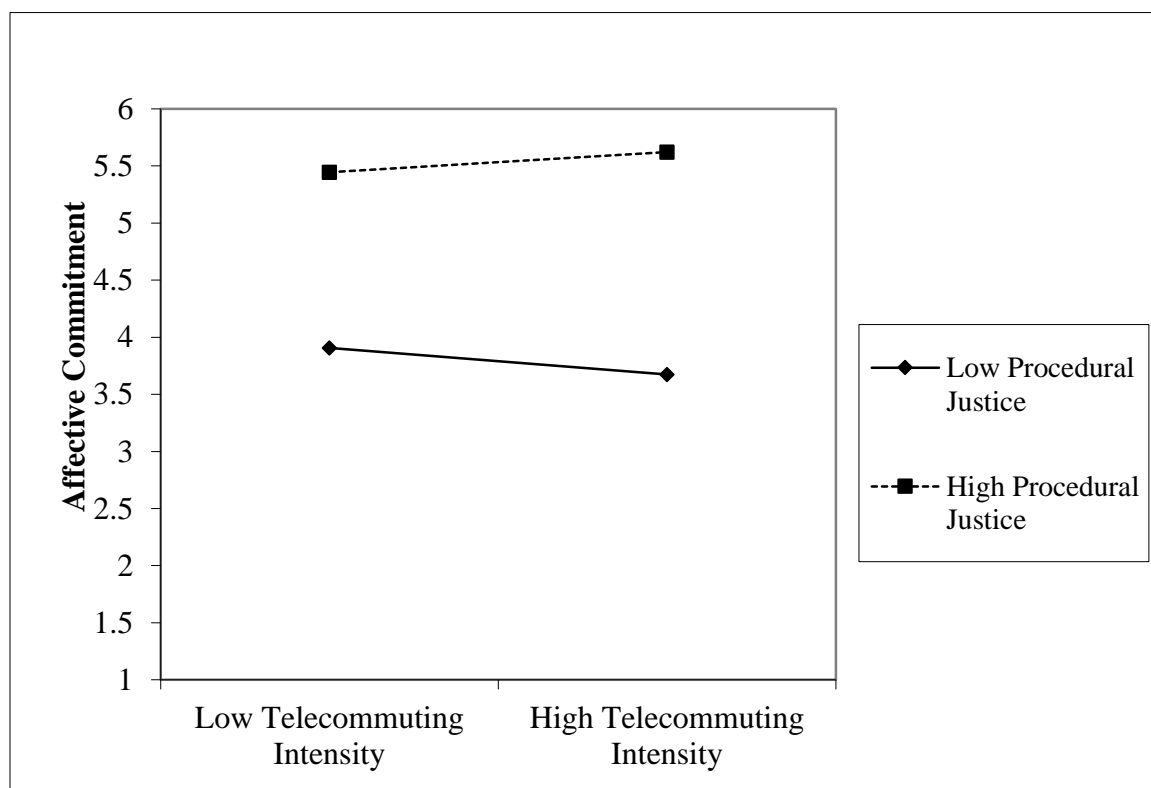
Figure 4. Two-way Interaction of Procedural Justice on the relationship between
Telecommuting Intensity and Affective Commitment

In summary, this sample continues to support extant research that overwhelming

affirms that the more demographically different an individual is to all others in their

organizational unit, then the less affectively committed the referent individual will be to

the organization (H1). Although not in support of the hypothesis (H2) in this current

study, the results continue to close the gap on the mixed results in the literature which shows that affective commitment is strongest for high-intensity telecommuters than low-intensity telecommuters or non-telecommuters. However the lack of significance for H3 is somewhat disappointing and the subsequent conclusion section offers reasons for such findings. As a final point, the significance of procedural justice on the relationship between telecommuting intensity and affective commitment is important as it upholds the importance of "voice" as a valid moderator of the relationship between telecommuting intensity and affective commitment.

Chapter 5 – CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

5.1 Conclusions, Limitations, and Future Research Overview

  The subsequent sections in this chapter provide an overview of the conclusions, limitations, and suggestions for future research. First, a summary of the implications of the findings are discussed. Next, limitations of the current study are reviewed along with recommendations for future research as part of the final conclusion of the dissertation.

5.2 Conclusions

  The goal of the current research was to show that two groups of individuals (i.e., demographically dissimilar individuals and telecommuters) that have consistently been labeled as having less organizational commitment than others in the workplace could actually be committed, and even emotionally committed, than previously considered possible. Achievement of this goal was expected to be accomplished by showing that telecommuting could have positive effects on the negative relationship between demographically dissimilar individuals and their level of affective commitment to the organization. In addition to this, the current study would also accomplish this goal by demonstrating that there may be an opportunity to minimize backlash and retaliation from non-telecommuting coworkers by creating a process that allows for participation in the decision to telecommute such that all employees are affectively committed to the organization regardless of whether or not they choose to telecommute. Understanding these interactions are key to promoting diversity and inclusion in a unique way that supports all stakeholders (i.e., different individuals, similar individuals, and companies) while also helping to manage the most diverse working population in the history of the

United States (Toossi, 2007). Accordingly, this study reviewed two research questions.

The first question answered by this research is how does telecommuting intensity

positively impact the negative relationship between visible demographic dissimilarity and

employee affective organizational commitment? The second question answered by this

research is how do perceptions of fairness about telecommuting choices impact the

relationship between the degree of telecommuting and employee affective organizational

commitment?

The results of this current study provide some answers for the aforementioned

research questions and gave way to some relevant practical insights which are discussed

in more detail in the upcoming subsections. Overall, we learned that the frequency of

telecommuting does not typically generate enough power to override the negative

emotions associated with being demographically dissimilar and having low-levels of

affective commitment. However, we can conclude that perceptions of fairness as it

relates to decisions to telecommute play an important role in stimulating employees' level

of affective commitment to organizations.

5.2.1 Using Telecommuting Intensity to Improve Commitment from Dissimilar
Individuals
This current study continues to affirm the theory of relational demography on

organizational commitment and specifically, affective organizational commitment. The

results (H1) further substantiate earlier research (Riordan, 1997) that showed that even

being perceived as dissimilar and perhaps not actually being dissimilar to others often

reduces the affective commitment to one's organization. That is to say that as the

identification risk increases of individuals' perceptions of their demographic dissimilarity

within a work group, the more an individual's affective commitment decreases. The

consistency of these results show that the perceptual dimension of identification is so strong that when identification is threatened, profound, negative emotions occur that supersede the desire to be committed to something that one does not identify with.

While it is expected that increased levels of demographic dissimilarity lead to decreased levels of affective commitment which continues to be unequivocally explained through sound theories (i.e., social identity and self-categorization), no moderation was found to support telecommuting intensity as a context-specific moderator (H3). As a matter of fact, the opportunity to contribute more fully to the relational demography literature was not met given that telecommuting intensity does not appear, by these results, to moderate or diminish the true nature and magnitude of being demographically dissimilar in connection with affective commitment. In large part, research asserts that a deeper understanding of the effects of relational demography could be garnered by examining its relationship with outcomes in various contexts with the expectation being that there must be a situation that renders the negative effects of perceptions of isolation and tokenism as negligible or completely unimportant. Unfortunately, the sample for this current study did not support this hypothesis specifically for telecommuting intensity as a context-specific moderator of the relationship between perceived relational demography and affective commitment.

On the other hand, these results (H1 and H3) offer very practical implications for today's managers of diverse teams. As a way to minimize negative affect from dissimilar individuals, managers should consider efforts to proactively monitor the balance of demographic differences within team structures. Overall, differences matter in the workplace and a specific set of differences may be more or less important to certain

groups of individuals. In the end, managers should consider solutions that minimize the negative emotions of being demographically dissimilar by understanding the specific combination of differences (i.e., race, age, gender, education, tenure, sexuality, region of origin, country of origin, culture, industry, etc.) that are considered most important to their teams.

From a theoretical perspective, social identity and self-categorization theories posit that differences are only salient when the referent individual considers the differences to be important to them (Tajfel & Turner, 1986; Turner 1987). Perhaps, the factors by which this study assigns dissimilarity does not resonate with the sample population (Riordan, 1997). For example, supplemental analysis suggested that tenure seemed to have the strongest association with affective commitment than any of the other perceived relational demography items. That is to say that perhaps differences in tenure evoke a stronger connection to affective commitment than any of the other factors but differences in tenure alone are unlikely to evoke enough strength to overpower the negative strength of the relationship between perceived relational demography and affective commitment. Further supplemental analysis of the data showed another interesting fact in that gender seemed to have the strongest interaction with telecommuting intensity. Basically, the more profound gender differences are within a work unit, the more likely that at least some frequency of telecommuting may diminish the negative relationship between perceived relational demography and affective commitment. It is possible that the supplemental analysis highlights the lack of variability with this study's sample which will be discussed later in the limitations and future research section.

5.2.2 Using Procedural Justice to Improve Commitment from Telecommuters

Previous research results have been mixed and have shown that both low-intensity telecommuting (Hunton & Norman, 2010; Fay & Kline 2012; Da Silva & Virick, 2010) and high-intensity telecommuting (Golden, 2006) lead to commitment. Results from this current study favor a more positive relationship between high-intensity telecommuters than low-intensity telecommuters or non-telecommuters. This result may be related to gender as this study's sample had fourteen percent more women than men who self-reported as high-intensity telecommuters and previous research (Mokhtarian et al., 1998; Lind, 1999) has shown that women more so than men perceive more advantages (e.g., stress reduction and increased family time as a result of decreased commute travel) from telecommuting than men. The prediction (H2) was that low-intensity telecommuters, more so than high-intensity or non-telecommuters, would have higher levels of affective commitment mainly for two reasons. First, research (Meehl, 1992) suggests that a psychological threshold or boundary occurs whereby gains to commitment are actually curvilinear and not linear meaning that too much excess (i.e., telecommuting) could be harmful and lead to reduced commitment. Basically, telecommuting more than 2 days per week would be in excess which would be harmful to working relationships and career progression and therefore high-intensity telecommuting was eliminated as being the most prominent group to have the highest levels of affective commitment. Second, and in general, telecommuters have been found to be more committed to the organization than non-telecommuters (Da Silva & Virick, 2010) most likely because non-telecommuters were shown to have less job-autonomy and job satisfaction, as well as more turnover intentions than telecommuters and therefore non-telecommuters were eliminated as being the most prominent group to have the highest levels of affective commitment. Although

the results do not completely align with the prediction in favor of low-intensity telecommuting, the results do provide partial support for high-intensity telecommuters having the highest level of affective commitment than low-intensity or non-telecommuters.

As proposed earlier, low-intensity telecommuters were thought to be best positioned to strengthen their identities because they would identify with both non-telecommuters and high-intensity telecommuters. In reality, the reasoning of a dual benefit (i.e., being able to identify with both groups) may have been overzealous given that low-intensity telecommuters may be less likely to feel connected to high-intensity telecommuters because they may rarely see or communicate with each other. On the other hand, given the median age of this study's current sample which was 42 years old and a median tenure of 8 years, it is plausible that the respondents were mid-career professionals that are mature and competent enough to work autonomously from home and still feel committed to an organization. Furthermore, while supplemental analysis indicated moderately high-levels of corporate culture (i.e., mean equals 4.8 on a 7.0 point scale) which reflected a general sense that respondents worked in organizations that they believed favored telecommuting, this multi-company study did not capture industry, as a limitation of the Qualtrics vendor, and therefore limited inferences can be drawn to speculate as to whether or not the respondents industry could have been a factor in high-intensity telecommuting being more positively related to affective commitment than low-intensity telecommuting or non-telecommuting. In other words, being in an organization that supports telecommuting and in an industry that characteristically supports telecommuting (e.g., Information Technology) may have been representative of the

experience of high-intensity telecommuters responding to this study and as such high-intensity telecommuting would lead to more affective commitment than low-intensity telecommuting or non-telecommuting.

While results (H2) indicating that high-intensity telecommuters are more affectively committed than low-intensity or non-telecommuters are believable, the results of this current study also contribute to the literature and counter the viewpoint that telecommuters have low-levels of affective commitment. As a matter of fact, the results of this study (H4) show us that the relationship between telecommuting intensity, at any level, and affective commitment is strongest for all employees when procedural justice is high. In the presence of procedural justice, which allows everyone to have a voice in the decision making process as it relates to telecommuting, the interesting fact is that having voice is an important driver of commitment even for those (i.e., non-telecommuters) that do not choose to benefit from the decision. To state it practically, organizations can benefit from affectively committed employees when they practice consistent decision making processes that allow their employees to have input into those decisions that determine telecommuting policies. Managers should consider the importance of "voice" and the notion that voice may drive affective commitment regardless of the context. Consequently, although not part of the hypotheses in this current study, these results also validate previous research findings that showed a significant relationship between procedural justice and affective commitment (Konovsky & Cropanzano, 1991). Again, reemphasizing the importance of allowing everyone an opportunity to participate in the decision making process thereby supporting the right climate of justice in the organization.

5.3 Limitations & Future Research

      This study's findings on relational demography continue to draw consistent and relevant conclusions about how demographic dissimilarities impact workplace attitudes such as commitment even when perceptual measures are examined. Although this current study was unsuccessful in demonstrating telecommuting intensity as a relevant, context-specific moderator for perceived relational demography's negative effect on affective commitment, there are a few limitations that may have contributed to this and other results. First, it is possible that the multi-company sample for this current study did not offer enough variance in demographic dissimilarity. Other researchers (Riordan & Shore, 1997; Clark et al., 2002) have previously suggested that surveying a multi-company population instead of a single company population would likely produce better demographic distribution for more within group dissimilarity which would lead to increased generalizability but that was not the case for this sample. The majority of respondents in this current study believed themselves to be *similar to* and *not different from* other individuals in their workgroup based on factors such as age, race, gender, education, and tenure. The reality is that diversity in the workplace continues to increase; however, the distribution of diversity within work units may still be less evenly distributed. The lack of confirming telecommuting intensity as a significant moderator for the negative relationship between relational demography and affective commitment may have been due to the lack of demographic distribution in the sample size causing a reduction in the statistical power thereby making it difficult to find a significant interaction.   A recommendation for future research would be to continue to consider multi-company samples for relational demography studies but to deliberately require more within work group dissimilarity among participants.

Next, this present study would have greatly benefited from capturing more ethnic categories. In this study, Hispanic respondents were more likely to identify as White than any other ethnic selection (i.e., American Indian / Alaska Native, Asian, Black / African American, Native Hawaiian / Other Pacific Islander, White, or Two or More Races). Previous research indicates that Hispanics showed negative attitudes in terms of workplace commitment unless the composition of the work group was racially balanced (Riordan & Shore, 1997). Therefore, by adding a category for Hispanics, an opportunity may exist to increase the distribution of diversity in the sample size thereby potentially changing the composition of diversity within the work groups. Future research should include more ethnic categories in relational demography studies.

Finally, this research specifically defined telecommuting's location as a home office. The belief was that different locations for telecommuting may produce different attitudes and behaviors based on the environments. In others words, working from home where it may be quiet may cause different attitudes than working from a coffee shop where it may be noisy. Inclusion of more remote locations such as satellite or mobile offices may yield more significant results for future researchers.

Overall, this current study provides valuable insight to managers of demographically different individuals and telecommuters that may have previously been considered less committed. Organizational leaders should understand that demographically different individuals are a permanent part of the workplace and will continue to require cultural sensitivities to help balance their identities. Organizations that welcome opportunities to gain knowledge regarding which differences are important to their culture may be successful in having more committed employees. Organizational

leaders should also understand that as technology advances, the need to consider

telecommuting may become more prevalent as the need to respond quickly to business

issues continues to be expected at anytime and from anyplace. As such, organizations

that provide their employees with a choice to telecommute and a voice in the decisions

regarding telecommuting may achieve success by minimizing workplace hostility

through fairness while also creating a blueprint that garners commitment from all

employees whether or not they chose to telecommute.

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APPENDIX

Appendix. Actual Survey Exported from Qualtrics

Qualtrics Prescreen – Country Culture

Q1 Are you currently employed by a company with headquarters in the United States of America?

❍ Yes

❍ No

> If No Is Selected, Then Skip To End of Survey

Prescreen Questions – Firm Size 100+

Q2 Are you currently employed by a company with more than 100 employees?

❍ Yes

❍ No

> If No Is Selected, Then Skip To End of Survey

Prescreen Questions – Telecommuting Intensity

Q3 Please describe your current work location situation by answering the following question: In a typical work week (i.e., 40 hours), how much time do you spend working at home for your employer instead of going into an office?

❍ I do not work in a home office

❍ Less than 1 day per week total

❍ 1 -2 days per week

❍ 3 - 4 days per week

❍ More than 4 days per week

Q4 Is your previous answer based on your choice to telecommute or not to telecommute?

❍ Yes

❍ No

Prescreen Questions – Demographic

Q5 The following questions are demographic in nature and will simply identify unique characteristics of each respondent. Please answer these questions based on the category that most accurately describes you.   What is your gender?

❍ Male
❍ Female

Q6 What is your age, in years? Please use whole numbers (e.g., 21, 25, 40, etc). _____

Q7 What is your Ethnic origin?

❍ American Indian or Alaska Native
❍ Asian
❍ Black or African American
❍ Native Hawaiian or Other Pacific Islander
❍ White
❍ Two or More Races

Q8 What is the highest educational level you have achieved?

❍ High School Diploma
❍ Some College
❍ College Degree
❍ Graduate Degree (MBA, MS, MA, etc.)
❍ Post Graduate work
❍ Post Graduate Degree (PhD, DBA, Ed.D., MD, etc.)

Q9 Using only whole numbers (e.g., 2, 3, 4, etc.), please answer the following question based on the number of years that you have been employed with your current employer. Round numbers up to the nearest whole number. Please report tenure of less than a year as 1. How long, in years, have you been employed with your current employer? _____

Kennesaw State University
Doctoral Research Study
Informed Consent Form

Thank you for your time!

As part of a research study, you are being invited to take a web-based survey as a result of your membership as a qualified panelist for Qualtrics. This study is being conducted by a doctoral candidate with Kennesaw State University and seeks to yield relevant insights related to telecommuting. Please read this form in its entirety prior to participating in this research study.

This is a two-part survey. Both parts of the survey have been pre-tested and should only take a total of 10 – 15 minutes to complete. Please answer all questions based on your current views as incomplete surveys cannot be used. All responses are confidential and specifically, your Internet Protocol address will not be captured. Furthermore, any data collected for this research will not be in any way linked to you or Qualtrics.

The second part of this survey will be administered approximately 24 hours after completion of the first part of this survey through receipt of an email invitation from Qualtrics. This survey is not setup with an automatic timeout which will allow you to complete the survey at your leisure. However, you will need to advance the survey by selecting the arrows marked (<<< or >>>) meaning PREVIOUS or NEXT. The survey will automatically close once you have responded to all questions. Additionally, if at any time you would like to exit the survey, then please discontinue the survey by simply selecting EXIT or closing your web browser.

Your participation in this research study is greatly appreciated! If you have questions about this survey or would like to receive a complimentary copy of the research results, then please contact Lisa Farmer at lfarmer9@students.kennesaw.edu.

Your participation is completely voluntary and you may withdraw your participation at any time without penalty. Furthermore, your participation in this survey does not obligate you to the researcher or the research institution. Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to Dr. Christine Ziegler, Chairperson of the Institutional Review Board, Kennesaw State University, 1000 Chastain Road, #2202, Kennesaw, GA 30144, (770) 423-6407.

Percent Diversity – Survey 1

Q11 When responding to the following statement, please fill in the blank with the choice of non-white or female and select the percent of non-white or female workers in your organizational unit.

I believe the percent of _____ workers in my work unit (i.e., individuals that report to the same supervisor, including yourself) is:

	Less Than 50%	Between 50% to 75%	More Than 75%
Non-white	O	O	O
Female	O	O	O

Firm Size – Survey 1

Q12 Based on the United States Office of Management and Budget (OMB) the following standard size categories are used for firms in the US.   Please indicate the size of your company as measured by the total number of employees.
- O 100 - 249
- O 250 - 499
- O 500 - 999
- O 1,000 - 2,499
- O 2,500 - 4,999
- O 5,000 - 9,999
- O 10,000 or more

Telecommuting Intensity (Hours) – Survey 1

Q13 Please estimate the number (whole number between 0 and 40) of hours your work from home for your employer during a given week (i.e., 40 hours)?

Perceived Relational Demography – Survey 1

Q14 The following questions ask you to consider personal comparisons between yourself and the members of your workgroup (that is, the group of coworkers who report to your same supervisor). For each characteristic, please rate your perceived similarity to the group as a whole using the rating scale provided. Please describe your personal perspective on this similarity, rather than the perspective that you might be expected to have.

Example *If I believe that the members of my workgroup are "somewhat similar" to me regarding our AGE, I would mark the corresponding point for the Somewhat Similar column.*

	Highly Similar	Somewhat Similar	Slightly Similar	Somewhat Dissimilar	Not Similar at All
AGE	❍	❍	❍	❍	❍
RACE/ETHNICITY	❍	❍	❍	❍	❍
GENDER	❍	❍	❍	❍	❍
EDUCATION	❍	❍	❍	❍	❍
TIME WITH COMPANY	❍	❍	❍	❍	❍

Q15 Including yourself, how many members comprise your workgroup? Please use a whole number such as 2 or 10. ___

Corporate Culture
Q16 Please indicate your level of agreement with the following statements:

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
My organization fully embraces, promotes, or encourages telecommuting (or work-at-home).	○	○	○	○	○	○	○
I believe my organization has a high level of trust and confidence in telecommuters that they would be committed, motivated, and will fulfill their daily responsibility remotely.	○	○	○	○	○	○	○
When my company designs, upgrades, or implements organizational solutions or processes, accommodating telecommuters is usually mentioned and considered to be an important aspect of the project.	○	○	○	○	○	○	○
I believe, in my organization, the reduced	○	○	○	○	○	○	○

physical visibility of a full-time telecommuter does NOT inhibit his/her career goal achievement.							
My organization provides most of the essential resources (such as paid Internet connection, peripheral devices) for telecommuters to work effectively.	❍	❍	❍	❍	❍	❍	❍
I believe telecommuters and office workers in my organization receive the same level of coaching and development opportunity.	❍	❍	❍	❍	❍	❍	❍
In my organization, social events such as holiday parties or company celebration events are usually organized in a way that it would accommodate telecommuters or remote workers (e.g.,	❍	❍	❍	❍	❍	❍	❍

setting up a web-cam or phone bridge for remote workers to participate virtually).							
I believe, in my organization, office worker do NOT have an advantage over telecommuters when it comes to performance evaluation and/or promotion consideration.	○	○	○	○	○	○	○
I believe negative perception of telecommuters or work-at-home employees does NOT exist in my organization.	○	○	○	○	○	○	○
I believe, in my organization, physical visibility is NOT important for attaining a management position.	○	○	○	○	○	○	○

***************************Insert 1 Week Time Delay************************

Affective Commitment – Survey 2

Q17 When responding to the following statements, please base your ranking on your primary job with your current employer. Only one selection is allowed per question.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I would be very happy to spend the rest of my career with this company.	○	○	○	○	○	○	○
I really feel as if this company's problems are my own.	○	○	○	○	○	○	○
I do feel a strong sense of "belonging" to my company.	○	○	○	○	○	○	○
I do feel "emotionally attached" to this company.	○	○	○	○	○	○	○
I do feel like "part of the family" at my company.	○	○	○	○	○	○	○
This company has a great deal of personal meaning for me.	○	○	○	○	○	○	○

Procedural Justice – Survey 2

Q18 When answering the following questions, please base your ranking on your primary job with your current employer. Only one selection is allowed per question. The following items refer to the procedures used to arrive at telecommuting in your workgroup. To what extent:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Are you able to express your views and feelings during those procedures?	○	○	○	○	○
Can you influence the decisions arrived at by those procedures?	○	○	○	○	○
Are those procedures applied consistently?	○	○	○	○	○
Are those procedures free of bias?	○	○	○	○	○
Are those procedures based on accurate information?	○	○	○	○	○
Are you able to appeal the decisions arrived at by those procedures?	○	○	○	○	○
Do those telecommuting decisions uphold ethical and moral standards?	○	○	○	○	○

Continuance Commitment – Survey 2

Q19 When responding to the following statements, please base your ranking on your primary job with your current employer. Only one selection is allowed per question.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
Right now, staying with my company is a matter of necessity as much as desire.	❍	❍	❍	❍	❍	❍	❍
It would be very hard for me to leave my company right now even if I wanted to.	❍	❍	❍	❍	❍	❍	❍
Too much of my life would be disrupted if I decided I wanted to leave my company now.	❍	❍	❍	❍	❍	❍	❍
I feel that I have too few options to consider leaving this company.	❍	❍	❍	❍	❍	❍	❍
If I had not already put so much of myself into this company, I might consider working elsewhere.	❍	❍	❍	❍	❍	❍	❍
One of the few negative	❍	❍	❍	❍	❍	❍	❍

consequences of leaving this company would be the scarcity of available alternatives.

Normative Commitment – Survey 2

Q20 When responding to the following statements, please base your ranking on your primary job with your current employer. Only one selection is allowed per question.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I do feel an obligation to remain with my current employer.	O	O	O	O	O	O	O
Even if it were to my advantage, I do not feel it would be right to leave my company now.	O	O	O	O	O	O	O
I would feel guilty if I left my company now.	O	O	O	O	O	O	O
This company deserves my loyalty.	O	O	O	O	O	O	O
I would not leave my company right now because I have a sense of obligation to the people in it.	O	O	O	O	O	O	O
I owe a great deal to my company.	O	O	O	O	O	O	O

Thank you for your participation!