REACTIONS TO TELECOMUTING DURING RECRUITMENT:

A LOOK AT GENDER, NEED FOR AFFILIATION, & NEED FOR AUTONOMY

by

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(Under the Direction of Kecia M. Thomas)

ABSTRACT

As organizations endeavor to recruit the most talented employees, new benefits to attract arise. This study examined the relationship between opportunities for home-based telecommuting and organizational attraction. It has been suggested that telecommuting provides several employment options to women that have long been unavailable. As telecommuting requires that individuals work in the more autonomous/less social environment of the home, it was hypothesized that individual attraction to telecommuting could be predicted, based on personality type and gender. This study found that organizations that offer telecommuting were perceived as more attractive than those without, especially by women. It was also found that respondent need for affiliation influenced attraction, while need for autonomy did not. Interactional effects were found between personality, gender, and telecommuting level offered.

INDEX WORDS: Recruitment, Flexible work arrangements, Telecommuting, Personality, Diversity, Gender differences

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DEDICATION

This thesis is dedicated to my loving family that has always encouraged me to be my best. To my mom and dad, I would not be, if it weren't for you. Thank you for always making me feel that I am exceptional. To my Granny and my grandfather (Dea.), it is because of your love, guidance, and protection that I have accomplished so much. To my grandma Evelyn and grandpa Stan, you have not only encouraged me to be successful in school, but you helped me to remember to value the arts, which has helped me have a well-balanced, exciting life. To my aunt Denise, you are the reason I value education. You taught me that no matter what's been accomplished, there's always more I can learn. To my cousins, who are like siblings, you've kept me grounded, and reminded me that although we all grow at different levels, the only thing that matters is that we continue to grown. Finally, this document is dedicated to my new husband. When I was unsure of my path, you stood by me with patience, support, and love.

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CHAPTER 1

INTRODUCTION

The workforce of today is constantly changing. In addition to technological advances, more women and ethnic minorities are in all areas of the workplace. Organizations are increasingly being called upon to adopt innovative policies that allow women and men to be more flexible in their time and place of work (Powell & Mainiero, 1999).

Advancements in technology have borne several virtual and flexible work arrangements, including that of telecommuting. Telecommuting (also know as telework) involves working from home during all or some portion of the workweek. There are an estimated 13.5 million full and part-time workers currently telecommuting (Labor Statistics, 2001). As parents increasingly try to manage career and family, organizations have considered using telecommuting as a family friendly human resource benefit to attract and retain top employees.

Telecommuting has been labeled as a benefit that should be attractive to the working mother, as the primary caregiver. Although telecommuting may allow more time in the home, it may not be for everyone. For example, telecommuting requires that the employee be willing to work without supervision and the social interaction provided by traditional work. It is important to examine the different personality traits (such as need for affiliation and need for autonomy) that may influence the attractiveness of an organization that offers telecommuting as a work option.

Heralded for its' benefits to the working mother, success in telecommuting may require personality traits that are actually more common in men. Research has shown that women are more social beings, and subsequently have a greater need for affiliation (Schroth, 1985). Women have also been found to be lower than men on the personality traits that are commonly categorized as need for autonomy (i.e. respect, power, and recognition) (Oishi, Diener, Lucus, & Suh, 1999). Although telecommuting has often been directed towards the female population, the seclusion of working from home could potentially reduce the attractiveness of this option. How well a person works with no motivating presence but themselves, would likely be related to their needs for affiliation and autonomy.

It is important to consider whether these needs, as well as gender, could predict attraction to organizations that allow/permit telecommuting. By understanding what attracts an individual to jobs that offer telecommuting, companies may be able to attract women who may have otherwise left the labor force. Ultimately, it may be possible to develop and provide training and support for employees at risk for being unsuccessful at telecommuting, but who are also interested in taking advantage of the options.

New Work Options

As technology increases, new options to attract diverse workers and accommodate their differences will arise. Today companies can implement flexible work scheduling (flex-time), onsite/offsite childcare centers, job-sharing, and flexplace (telecommuting) as employment inducement strategies. Flexplace and flextime are repeatedly seen as a way to achieve balance in work and family life (Zedeck, 1992; Hill, Hawkins, Ferris, & Weitzman, 2001). Flextime is described as the ability to rearrange one's work hours within certain guidelines offered by the company (Hill, Hawkins, Ferris, & Weitzman, 2001). This option usually requires that the

employee work a specified number of hours on site and include a specific time block. Flextime programs have been found to have some success (Christense & Staines, 1990).

Another attraction option is flexplace. Flexplace is broadly defined as giving employees varying degrees of control over where their work is done (Hill, Hawkins, Ferris, & Weitzman, 2001). The term generally is used for a flexplace option is telecommuting. Telecommuting simply refers to the substitution of information technology for the commute to and from work (Rau & Hyland, 2002). Telecommuting calls for employees to work from a fixed, offsite location, usually the home. It can be fulltime, but is often one or two days a week. In the virtual office, employees are given the portable means to do their job wherever and whenever it makes sense (Hill et al.).

Kurland and Bailey (1999) identified four ways to telework: through satellite offices, neighborhood work centers, mobile working, and home based telecommuting. In satellite offices, employees work outside the home in a location convenient to the employees and/or customers. A neighborhood work center houses multiple companies' employees. In both situations, the employees' commute is reduced, but the employee's remain in an office building. In the event that an employee's job calls for heavy travel, mobile workers use communications technology to work from home, car, plane, or hotel and communicate with the office as necessary from each location.

The growth of telecommuting has been attributed to the need for increased income, stresses of urban commuting, compatibility of single parenting with telecommuting, the desire for more free time, growth of new technology, and organizations efforts to be more efficient and competitive (Goodrich, 1990). The most common type of telework used is home-based. Therefore, this study will focus on home-based telecommuting.

Benefits of Telecommuting

Some common rationales for telecommuting include enabling a parent to care for a child, allowing a valuable employee to take a new position without physically relocating, and accommodating a person with a disability (Hill & Hawkins, 1996). Given the same workload, individuals with the perceived job flexibility offered by telecommuting, may have a more favorable work-family balance (Hill, Hawkins, Ferris, & Weitzman, 2001). Benefits to the worker include greater productivity, control over their work, savings on food, clothing, and transportation, and more flexible home life scheduling (Goodrich, 1990).

Viewing telecommuting as an added benefit, employees are less likely to switch jobs (saving time and money) (Schilling, 1999). Other positive consequences for organizations with telecommuting programs that have been reported, are that employees take fewer sick days, are absent less, have higher job satisfaction, and have higher work performance ratings (Kurland & Bailey, 1999; Powell & Mainiero, 1999). Telecommuting gives employees more job opportunities by making long-distance job opportunities available without requiring relocation. As a result of telecommuting, job relocation of one partner will cause fewer difficulties for spouses and families, because work of either partner can be performed at a distance (Powell, 1997).

Several benefits for the telecommuting employer have been reported. Benefits to the organization include improved productivity, communication, recruiting advantages, retention, greater staffing flexibility and cost control, reduced costs associated with less office space, and improvement in information turnaround (Goodrich, 1990). Telecommuting can produce cost savings for employers after only one year by decreasing office space. The telecommuting option does not cost companies much of anything (Schilling, 1994). By requiring less office space and

support staff, it can reduce employer's energy and office expenses (Caudron, 1992). Increased retention can reduce the company's recruiting and training costs (Schilling, 1994). Retaining talented employees will ultimately reduce the amount of money that the company has to spend on expensive recruitment programs (Younes, 2001).

For people with significant disabilities, home based and telecenter-based telework are most accessible. Anderson, Bricout, and West (2001), found that an alternative work arrangement of particular interest to people with disabilities is telecommuting. For persons with significant disabilities, the increasing prevalence of telework offers the possibility of an accessible, barrier-free workplace, flexible scheduling and the elimination of disabled related bias or discrimination. Findings from several long-term projects, which began in 1969, suggested that homebound work resulted in higher salaries for the disabled workers, and achieved productivity ratings equal or superior to those of non-disabled workers (Joice, 1991).

Telecommuting and Attraction to Organizations

Organizations must know how to make job candidates feel wanted by knowing what is important to them. Theoretical and empirical works have suggested that variations in attraction practices can have important effects on long-term outcomes and have a positive impact on the quality of those attracted to and retained by organizations (Rynes & Barber, 1990). In other words, organizations can proactively mold selected organizational characteristics to attract those considered most desirable in the labor force (Turban & Keon, 1993).

One reason identified for staffing difficulties is a lack of leading-edge recruitment and training strategies designed for a diverse labor force (Perkins, Thomas & Taylor, 2001). Attraction of non-traditional applicants [such as women and workers with disabilities] may increase long-term organizational viability by imparting new skills, methods, and viewpoints that

are critical to organizational adaptability (Rynes & Barber, 1990). In order for organizations to better attract minority job applicants, they must first understand the obstacles that have prevented their recruitment in the past (Perkins et al., 1999). It has been suggested that organizations that wish to target a specific applicant pool may find that tailoring inducements is a cost-effective strategy.

Rynes and Barber (1990) identify altering employment inducements and targeting nontraditional applicants as two distinct strategies for increasing attraction success. Altering employment inducements involves deliberately modifying attributes for the explicit purpose of enhancing the attractiveness of a job to potential applicants. It has also been suggested that employees be viewed as a key customer group that should be marketed towards by using a targeted market recruitment, making work-life easier for employees, and creating a positive recruitment image (Capowski, 1997). An organization that offers telecommuting can potentially make work-family balance easier for all employees.

Grover and Crooker (1995) found that people are more attached to companies when they individually benefit from the progressive human resource policies. Telecommuting offers many benefits for both employer and employee. As suggested by Rynes & Barber (1990), telecommuting may be an employment inducement of growing importance. Telecommuting is a practice that can potentially be used by all employees. Given that telecommuting can be offered to all employees, all employees can use it.

Hypothesis 1: The opportunity for telecommuting will be positively related to organizational attraction.

Impact on Diversity

Although all employees can potentially benefit from telecommuting, gender may affect attraction to this benefit. Gender differences are conditioned by social context. Barriers associated with balancing the multiple domains of career and family are more likely to be perceived by college women than by college men (Luzzo & Hutcheson, 1996), therefore women may also be more likely to be more sensitive to the impact telecommuting may have on work/family balance.

More than two thirds of American mothers are now employed outside the home, and women take on the bulk of the care giving responsibilities for children as well as for parents (Dautzenberg, 2000; Berry & Rao, 1997; Gerstel & McGonogle, 1993). Dautzenberg (2000) cited research that asserts that care giving cause's employees to arrive to work lake, leave early, miss work, or experience frequent work interruptions.

Moderating Role of Gender

It appears that women consider leaving organizations for the same reasons that men do: dissatisfying jobs and limited career advancement opportunities (Powell, 1998). Thus making these two important areas for increasing retention. Women are particularly likely to perceive a need for job leaves, and more likely to take them (Gerstel & McGonagle, 1993). Their career development appears to be substantially more vulnerable to competing role priorities and environmental demands than men's (Luzzo & Hutcheson, 1996). Yet, it has been found that more consistent labor force participation was associated with enhanced occupational advancement (Phillips & Imhoff, 1997). Early child bearers are likely to experience a higher wage penalty because their career interruptions occur during a prime career building stage (Taniguchi, 1999).

Women more often reported schedule conflicts, presumably because women more often have to see that family responsibilities are met and have to arrange their work schedule accordingly. Research has shown that a key source of stress for individuals managing multiple role commitments is the nature of their personal work and family role expectations (Ameta, Gross, Clark, & Bably, 1986). Work schedule flexibility has been linked to low levels of work-family conflict (Powell, 1999).

Work-family conflict has been shown to be more strongly associated with lowered career satisfaction for women than for men (Martins, Eddleston, & Veiga, 2002). Yet if exclusively managed, it has been reported that employed women, whether married or parents, reported greater well-being than unemployed women and that married women who had children and held high prestige jobs reported the greatest well-being (Barnett & Hyde, 1985). It has been found that more consistent labor force participation was associated with enhanced occupational advancement (Phillips & Imhoff, 1997). Telecommuting may offer an alternative that allows women to remain in the workforce and thus reap its benefits, like well-being.

Halford, Savage, and Witz (1997) found that women expressed beliefs that opportunities for upward mobility are diminished by employers' views that the capacity of women is essentially incompatible with larger organizational goals. Mothers of young children spent less time at work, were less psychologically involved in work, and received less coaching and fewer developmental assignments than women without children (Powell, 1999). Gender biases prevalent in the workplace assume that women are less committed to work and are less loyal to organizations than their male colleagues (Kramer & Lambert, 2001).

Findings indicate that many women with substantial family responsibilities reduce their behavioral and psychological involvement in work, in response to actual or anticipated work-

family conflict (Powell, 1997). Women that bear children early in their career are likely to experience a higher wage penalty because their career interruptions occur during a prime career building stage (Taniguchi, 1999). There is a common perception that the cost of employing women is greater than that of employing men (because of turnover related to maternity), and to reduce this cost, corporations should provide more flexible employment arrangements for women who want to combine career and family (Hall, 1990).

Although men may perceive telecommuting as attractive, women are expected to be more attracted to telecommuting because of the salience of leave for family care to their career growth. Telecommuting may allow career-oriented women the opportunity to continue advancing in their careers, without career advancement/wage penalty, or family neglect. Therefore, women should be more attracted to telecommuting. Since men may not perceive a need for family leave from work, and can consistently work towards their career goals, women will be more attracted to the offer of telecommuting. Women have been found to respond more positively than men to the presence of a flexible work schedule, and to place more importance than men on receiving parenting support in the form of child care, alternative work hours, and flexible work schedules (Powell, 1999).

> **Hypothesis 2:** Gender will moderate the relationship between telecommuting and attraction. Attraction to telecommuting will be higher for women than men.

Personality in a Staffing Context

There is widespread use of personality tests by organizations interested in improving recruitment, selection, development, and promotional procedures (Furnham et al. 2000). Recently, the role of personality testing in personnel selection has been researched extensively (e.g. Ones, Viswesvarn, & Reiss, 1996; Roberston & Smith, 2001; Costa, 1996; Stokes &

Cooper, 2001). For example, Van Mierlo & Rutte (2001) found support for the hypotheses that group autonomy is positively related to psychological well-being, and that the relationship is mediated by individual autonomy, individual task variety, individual workload, and social support.

Personality characteristics have been shown to be more strongly related to job search behavior than to employment status (Kanfer et al., 2001). Job seeker's preferences for organizational cultures are based on their personality (Judge & Cable, 1997). Boudreau et al. (2001) found that personality, specifically openness to experience and agreeableness, significantly enhanced the prediction of job search intentions over situational variables (e.g. salary, job satisfaction, and perceived organizational success). They suggested that further research look at job search and the personality traits that relate to specific organizations.

Personality and Technology

There has been a surge of technological advancements over the last decade. The US Census Bureau reported that in 2001, 51% of US households had one or more computers, and 42% had internet access. As computers, internet capable personal digital assistants (PDA's), and cellular phones are rapidly becoming cheaper and more accessible, at-home capabilities are increasing. Employees can now have access to files and company software at home, making this option a relatively new area for research.

Although much research has been done on the benefits of telecommuting with respect to the employer and the employees overall reaction, there has been less published research done to date with respect to personality and telecommuting. A strong positive relationship between personality variables and career issues for work demanding a high degree of employee autonomy has been found (Dykeman & Dykeman, 1996). Telecommuting demands such autonomy, in that

the employee must be self-motivated to perform the job at an off-site location. Human motivational needs may help to predict which employees are more likely to be attracted to such an option.

Human needs have been studied for years as a way to understand the motivations that influence behaviors. Various researchers have looked at the influence of personality on human motivational behaviors. Many theories have components similar to the need for affiliation and need for autonomy. I will focus on Maslow's need system, one of the most predominant theories of personality needs (Cunningham et al., 1975).

Maslow's hierarchy of needs include the physiological needs of safety, belongingness, love, and esteem, and finally a need for self-actualization. Third in the hierarchy, are the belongingness and love needs, which are composed of the social needs for affiliation, affection, close relations, etc. The esteem needs include desires for social status, respect, recognition, achievement, and power/autonomy.

Affiliation

The need for affiliation is the desire to interact socially and to be accepted by others (Heckert, 2000). It refers to the desire to be accepted by or to establish identity with an individual, group, or organization (Barbuto, Fritz, & Marx 2002). Corresponding to individuals' desire for social contact or belongingness, it is associated with tendencies to receive social gratification (rewards) from harmonious relationships and from a sense of communion with others (Wiesenfeld, 2001).

Need for affiliation has been found to be a predictor of job performance and favorable attitudes (Cornelius III & Lane, 1984). Morrison and Sebald (1974) examined affiliation differences between female executive and non-executive personnel (none were found).

Wiesenfeld et al (2001) found need for affiliation to moderate the relationship of organizational identification with regards to telecommuting.

Affiliation and Gender

Murray's need for affiliation has been widely studied. Need for affiliation is a personality attribute corresponding to individuals' desire for social contact or belongingness. Individuals high in need for affiliation are more concerned about opportunities to mix socially. The need for affiliation is similar to Maslow's belongingness needs. Andersen et al. (2000) defines this as the need for human connection, including tenderness, warmth, emotional responsiveness and acceptance.

It is possible that not everyone satisfies his or her needs in the same order. Oishi (1999) found esteem needs more satisfying for Western cultures, while belongingness needs were valued more in collectivist cultures. The same difference has been found between American men and women, such that women have been found to be higher in belongingness needs than men (1999). Therefore it was expected that women would be higher in their need for affiliation than men.

Hypothesis 3: Females will have higher affiliation needs than males.

Affiliation and Telecommuting Attractiveness

In the absence of work-based social support, virtual workers with high need for affiliation may feel increasingly separate, autonomous and distant from the organization and may be less responsive to social cues regarding their membership in the organization (Wiesenfeld et al., 2001). Hall (1990) found that working at home is likely to be most satisfying to people who do not have high needs for affiliations, support, or power. The literature suggests that individuals

high in need for affiliation will be less attracted to the isolated work environment of telecommuting.

> **Hypothesis 4:** Need for affiliation will moderate the telecommuting-attraction relationship; individuals higher in their affiliation needs will be less attracted to telecommuting than individuals higher in need for affiliation.

Affiliation, Gender, and Attraction

Although the research is inconclusive as to the direction of the relationship, there is evidence for a possible interaction of need for affiliation, gender, and attraction to telecommuting. Women may be more likely to have higher levels of need for affiliation than men. Those women with higher levels of need for affiliation may subsequently be less attracted to the option of telecommuting than women with a low need for affiliation. The same may be said of men, men with higher need for affiliation may be less attracted to the option of telecommuting than those with a low affiliation need.

> **Proposition 1:** There will be a three-way interaction between need for affiliation, gender and telecommuting opportunity.

Autonomy

Autonomy has been defined as the need to freely choose and determine one's own actions (Andersen, Chen, and Carter, 2000). Autonomy can be characterized as the sense of competence, control, achievement, or agency that enhances a person's sense of well-being or sense of self-worth (Sato & McCann, 2000). Autonomy concerns people's feelings of volition, agency, and initiative (La Guardia, Ryan, Couchman, & Deci, 2000). The need for autonomy is the desire for self, rather than the other (Heckert, 2000).

Autonomy is displayed during opportunities for choice and an absence of salient external controls and rewards (Ryan, 1995). Persons are autonomous when they fully endorse the actions in which they are engaged and the values expressed by them; the person feels initiative and

stands behind what he or she does (Chirkov, Ryan, Mount, & Kaplan, 2003). Autonomous individuals are self-organized and not merely cued or prompted by exogenous pressures (Deci & Ryan, 2000).

Deci and Ryan (2000) found that providing autonomy support (relative to control) was associated with increased satisfaction and enhanced well-being. Autonomy enhances feelings of work satisfaction, which can spill over and affect attitudes within the family, eventually enhancing the quality of marriage and the way a parent interacts with children (Powell, 1999). Morris & Synder (1979) looked to see if need for autonomy moderated the relationships of role conflict and role ambiguity, organizational commitment, job involvement, and turnover. They found no support for moderation, but they found evidence of a predictive relationship for need for autonomy and the organizational facets. Stone et al. (1977) also that found need for autonomy did not moderate the relationship between job scope and job satisfaction. Although need for autonomy has not been shown to have a negative effect on the aforementioned facets of organizational life, this may be due to self-selection. Personality factors may influence job choice, and people may cluster in certain jobs that coincide with their personality types.

Autonomy and Gender

Individuals with extensive job autonomy have been found to experience relatively little work-family conflict (Powell, 1999). However, achieving autonomy has been difficult for many women (McBride, 1990). Women tend to be higher in their belongingness needs, as compared to the need for autonomy. Sacks and Einstein defined autonomy in women as believing in one's ability and taking steps toward fulfilling goals, along with a feeling of power (1979). Positive work experiences- high autonomy and control, work schedule flexibility, and social support- can enrich family life, promoting work-family integration (Powell, 1999).

Even though high autonomy may be beneficial for women, Miller (1987) argued that when women struggle to develop themselves as strong independent/autonomous individuals, they threaten many relationships. When women choose to work, they disproportionately choose jobs where they are able to nurture and help others, and they are not in positions of power. It has been said that women choose to do various gender-traditional tasks, as a means of expressing and reinforcing their feminine self-identity (Chafetz, 1990).

Lower need for autonomy in women, may be related to American socialization of women to be nurturers. Alvesson & Billing (1997) stated that men are socialized to deny feelings of vulnerability, while women are more open to feelings such as self-doubt; which may reduce self-confidence, while promoting self-disclosure, establishing contact, and building networks. They also note the argument that men's identity is more connected to and dependent on a paid job, while women's identity is more connected to the home and the family (Alvesson & Billing, 1997)

In a work achievement orientation scale by Veroff, McClelland, and Ruhland (1975), the factor of assertive competence motivation was highly correlated with autonomy. Their data corroborates the stereotype that women are less interested than men in performance that requires assertiveness via power and autonomy, especially at the cost of affiliation or acceptance by others.

Women tend to see power as a capacity stemming from and directed towards the entire community, while men view it as an opportunity for domination and ability to control (Alvesson & Billing, 1997). Subsequently it was expected that males will have a higher need for autonomy than the females.

Hypothesis 5: Males will have a greater need for autonomy than females.

Autonomy and Telecommuting Attractiveness

Chrikov, Ryan, and Kim (2003), specified that a person on the higher end of the autonomy continuum will consciously endorse a given behavior or value as having personal significance and important. This is in contrast to a low need for autonomy person, which will act only to obtain external rewards or to escape punishment or reward loss. Mowday et al. (1978) found that female clerical employees that left the organization, were characterized by higher need for autonomy. Tett and Murphy (2002) found that employees with low need for autonomy preferred more dominant employers.

Telecommuting requires that workers be able to set limits and control their own work environment. When employees are accustomed to high supervisory power, people may not feel comfortable making decisions that their managers have previously made (Randolph & Sashkin, 2002). Individuals low on need for autonomy may perceive that telecommuting does not offer them the level of supervisory supports that they desire.

Hypothesis 6: Autonomy will moderate the telecommuting-attraction relationship;

individuals higher in their autonomy needs will be more attracted to telecommuting than

individuals lower in need for autonomy.

Autonomy, Gender & Attraction

As mentioned with affiliation, men and women prioritize their work and family roles differently. Because of individual differences, motivational needs for both groups are likely to fall on a continuum. Although research has shown that women are more likely to have lower levels of need for autonomy than men, all women will not have the same need. Those women with higher levels of need for autonomy may be more attracted to the option of telecommuting than women with low need for autonomy. The same may be found in men, men with higher

need for autonomy may be more attracted to the option of telecommuting than those with a low autonomy need.

Proposition 2: There will be an interaction between need for autonomy, gender, and telecommuting opportunity.

CHAPTER 2

METHODS

Participants

Two hundred and ninety-eight juniors and seniors from a large southeastern university participated in this study. Voluntary participants were sampled from two populations. The first population sampled included 89 students, 25 recruited through a psychology research pool and 64 through psychology classes. Students were given the choice of earning research credit for their participation or entry into a raffle for four $20 prizes. The remaining 208 participants were recruited through a junior and senior level business marketing class. These subjects were also entered into the raffle. Prizes were given at the completion of the data collection.

Thirty-one subjects (10.7%) were removed for failing to answer the manipulation check or failing to complete the personality scale. Of the remaining 267 subjects, only those that correctly identified the manipulation check were retained for data analysis.

The final sample was 58% female (N=138) and 42% male (N=101). Eighty-nine percent of the participants were between 20 and 25. The sample was comprised predominantly of students from the College of Business (65%, N=155) and from the College of Arts and Sciences (19%, N=44). A summary of the demographics of the sample is reported in Table 3.

Procedure

All participants were given a short written description of human resource benefits to familiarize them with various employment benefit options (Appendix A). This description included definitions of flextime, job sharing, and telecommuting. Participants were told to read

the definitions to familiarize themselves with different options that employers are offering to attract employees. Participants then received an organizational advertisement that randomly included different levels of telecommuting (full-time, part-time, no telecommuting) (Appendix B-D). They were told that they were receiving a copy of a magazine advertisement for an actual organization whose name had been changed. Participants were asked to look it over carefully for at least 3 minutes, however they were given the opportunity to study the advertisement for as long as 5 minutes.

After all advertisements were collected, participants were given a questionnaire packet. Participants answered questions related to their perceptions of attractiveness, compatibility, and the image of the organization (Appendix E). They were then asked to indicate which level of telecommuting they received. Next participants completed a personality inventory (Appendix F). Participants filled out a personality scale related to general needs for affiliation and autonomy, as well as needs for affiliation and autonomy in the workplace. Finally a background questionnaire was completed (Appendix H).

Measures and Materials

Attraction, Image, and Compatibility. These questions were developed by Perkins, Thomas, and Taylor (2001), and adapted for use with the current sample. The 13-item scale is comprised of 3 subscales. All questions were rated using a 5-item Likert scale, with 1 representing strongly disagree to 5 representing strongly agree.

Attraction, as measured by Perkins et al., included five-items that measure an individual's attraction to organizations with a Cronbach's alpha of 0.90. An example item is, " I would request additional information regarding the possibility of employment with this company."

Based on a reliability analysis of this scale for this sample, this measure was reduced to three

questions with an internal consistency of α= .81 (see Table 1).

The Image subscale developed by Perkins et al. contained three items. An example item

is, "This company appears to care about its' employees." All of the items were retained to

achieve an internal consistency of .86 (see Table 1).

Compatibility, as measured by Perkins et al., included four-items that measured the

degree to which an individual thinks the organization will match their personal desires and

needs. Perkins et al. found a Cronbach's alpha of 0.86. An example of an item from this

subscale is "I would feel at home working for an organization like this". The reliability analysis

of this subscale showed that the best reliability is found using all items, however it is lower that

originally found by Perkins et al. with an Alpha of .6636 (see Table 1).

Need for Autonomy. This scale was adapted from scales developed by Amabile, Hill,

Hennessey, & Tighe (1994), Armeli, Eisneberger, Fasolo & Lynch (1998) and Eisenberger,

Rhoades, and Cameron (1990). The 10-item scale included questions that measure need for

autonomy in personal and work situations. A sample item from the scale is "I enjoy having

control over my own destiny". Based on a reliability analysis the scale was found to have

sufficient internal consistency (α=.76) (see Table 2).

Need for Affiliation. This scale was adapted from scales developed by Amabile, Hill,

Hennessey, & Tighe (1994), Armeli, Eisneberger, Fasolo & Lynch (1998) and Eisenberger,

Rhoades, and Cameron (1990). The 8-item scale compiled included questions that measured

need for affiliation in personal and work situations. A sample item from the scale is "To me,

success means doing better than other people." Based on a reliability analysis, the scale was

reduced to 4 items (α=.85). Only questions that measured need for affiliation in work situations were retained (see Table 2).

Background Questionnaire. A background questionnaire concluded survey. Participants self-identified demographic categories such as gender and age. Gender was coded 1=Female and 2=Male. They were also asked to indicate via a checklist whether they currently hold a full-time job, when they plan to enter the workforce full-time, and when they plan to begin looking for an employer.   Table 3 summarizes the background information.

Manipulation Check. This study involved the manipulation of telecommuting level. Telecommuting level was coded 1=no telecommuting, 2=part-time telecommuting, and 3=full-time telecommuting. Participants were asked to put a check to indicate which level of telecommuting was mentioned in the advertisement they received. This question was embedded in the background questionnaire (Appendix H). Ninety percent of the subjects correctly recalled the manipulation check (N=239), and were subsequently retained for data analysis.

TABLE 1

ATTRACTION, IMAGE & COMPATIBILITY ITEMS RETAINED FOR ANALYSIS

Attraction   *α= .81*

I would request additional information regarding the possibility of employment with this company.

I would speak to a company representative about the possibility of employment.

I think this organization is attractive.

Image   α= .86

This company appears to care about its' employees.

This company portrays a favorable image.

This company may be a good company to work for.

Compatibility   α= .66

I would feel at home working for an organization like this.

I would very much like to work for this organization.

This organization will likely meet my desires and needs.

I would have no problems adjusting to this organization.

TABLE 2

PERSONALITY ITEMS RETAINED FOR ANALYSIS

<u>Need for Autonomy</u> α= .76

I prefer a job where I have a lot of control over what I do and when I do it.

When it comes to orders, I would rather give than receive them.

I enjoy having control over my own destiny.

I enjoy making my own decisions.

I try to avoid situations where some else tells me what to do

I prefer to avoid situations where someone else tells me what it is I should be doing.

Curiosity is the driving force behind much of what I do.

I prefer to figure things out for myself.

I'm more comfortable when I can set my own goals.

I enjoy doing work that is so absorbing that I forget about everything else.

<u>Need for Affiliation</u> α= .85

I think being close to others, listening to them, and relating to them on a one-to-one level is one of my favorite and most satisfying pastimes.

Just being around others and finding out about them is one of the most interesting things I can think of doing.

I feel like I have really accomplished something valuable when I am able to get close to someone.

I would find it very satisfying to be able to form new friendships with whomever I like.

TABLE 3
Sample Demographics

CHARACTERISTIC	FREQUENCY	PERCENT
Sample Size	239	100
Gender		
Male	101	42.3
Female	138	57.7
Age		
19	22	9.2
20-25	213	89.1
> 25	4	1.7
Classification		
Junior	137	57.3
Senior	48	20.1
Other/Missing	54	22.6
College/Major		
Business	155	64.9
Arts & Sciences	44	18.4
Other	16	6.7
Missing	24	10
Parenting Expectations		
Want/Have children	202	84.5
Don't want children	33	13.1
Missing	4	1.6
Employment Status		
Full-time worker	11	4.6
Part-time worker	86	36
Full-time student	142	59.4
Desire to Telecommute		
Want to Telecommute	156	65.3
Don't want telecommute	81	33.9
Missing	2	.8
Job Search Status		
Currently Looking	26	10.9
Will be looking in next year	109	45.6
Not looking, planning to attend graduate/prof. school	75	31.4
Not looking, accepted post-graduation position	9	
Not looking, Other	20	8.4
Belief that future job will allow for telecommuting		
Yes	114	48.9
No	119	51.1
Missing	6	2.5

CHAPTER 3

RESULTS

Table 4 presents means, standard deviations, and correlations of the measured variables. Average attraction was 11.26; average image was 11.95; and average compatibility was 12.67. Opposed to hypothesis 1, telecommuting level was not significantly correlated with attraction (r=-.060, p=ns), image (r=-.80, p=ns), or compatibility (r=-.016, p=ns). The gender, attraction correlation was significant (r=-.123, p=.058), suggesting a main effect of gender on attraction. A significant correlation between gender and image was also found, (r=-.125, p=.053). However, gender was not significantly correlated with compatibility (r=.025, p=ns). Correlational analysis of the dependent variables, the independent variables, and the control/exploratory variables showed no significant relationship between age and major and any of the dependent variables (see Table 4).

Demographic information about the sample is presented in Table 3. Forty-nine percent of the participants believed their desired careers would allow them to telecommute, while 51% believed that telecommuting was not an option for them.

Personality

Having assessed the relationships between the dependent variables and gender, correlations were performed to test the relationship between personality and gender. As expected, gender was negatively correlated with affiliation (r=-.219, p<.01), while it was not significantly correlated with autonomy (r=.073, p=ns). Need for autonomy and need for affiliation were significantly positively correlated (see Table 4). To gain a better understanding

of the relationship between personality and gender, t-tests were performed. The results of the t-tests are shown in Table 5. As proposed in hypothesis 3, the t-test showed that there was a significant gender difference in need for affiliation (t (1,237) = 3.454, p<.01), such that women were higher in their need for affiliation (M=16.29), than men (M=15.13) (see Table 6). Although a significant difference was not found in autonomy (t(1,237)=-1.134, p=ns), the gender differences in need for autonomy proposed in hypothesis 5 was in the expected direction (M=37.47 for women, M=38.20 for men). It should be noted that range of women scores varied significantly for need for autonomy compared to men (see Table 7)

Hierarchical regression was used in to examine the direct and interactive effects of gender, personality, and telecommuting level on each of the dependent variables. Hierarchical regression equations first considered main effects, next tested for two-way interactions, and then examined higher order interactions (Cohen & Cohen, 1975, pp. 303-308). Tables 8-13 present the regression analyses results for the three dependent variables. The first equation in each table contains the variables gender, autonomy, affiliation, and telecommuting level, the second equation contains three 2-way interaction terms that include gender, autonomy, affiliation, and telecommuting level, and the third equation contains the 3-way interactions of gender x level x affiliation, and gender x level x autonomy.

Attraction

Participants' attraction was the principle dependent variable of interest. Tables 8 and 9 present the regression results for attraction. With all variables of interest entered, Model 1, was not significant, (F(4,234)=.983, p=ns). There was a significant negative effect of gender on attraction in this model (β=-.113, p<.05), however when the interactions were examined, no

significant effects were found. Model 2, was also not significant, $(F(7,231)=.270, p=ns)$. There was no significant change in R^2 $(\Delta R^2=.003, p=ns)$.

There was a significant change in R^2 for the full model, (Model 3), over Model 2 $(\Delta R^2=.041, p=ns)$. Model 3, was significant $(F(9,229)=5.030, p<.05)$. In this model, the level variable is significant $(\beta=1.913, p<.05)$ supporting hypothesis 1. Telecommuting level had a significant and positive effect on participants' attraction.

Based on the full model, support for several 2-way interactions were also found. The gender x level interaction, hypothesis 2, was supported $(\beta=-2.817, p<.01)$. Women were most attracted to the no telecommuting advertisement and least attracted to the full-time telecommuting advertisement. However, men were least attracted to the no telecommuting advertisement and most attracted to the full and part time advertisement.

Partial support for hypothesis 4, an affiliation x level interaction, was found $(\beta=-1.087, p<.05)$. There was a negative relationship between telecommuting level and attraction for individuals high in need for affiliation. However, people lowest in need for affiliation did not vary much in their ratings of attraction across all levels of telecommuting.

A significant three-way interaction was found supporting Proposition 1, the gender x level x affiliation interaction $(\beta=1.223, p<.05)$ (see Figures 1 & 2). Women low in need for affiliation were most attracted to full-time telecommuting, and women high in need for affiliation were least attracted to the full-time telecommuting organization. Males lowest in need for affiliation were least attracted to the no-telecommuting organization and males highest in need for affiliation were most attracted to the no telecommuting organization.

Support for Proposition 2, a three-way interaction between gender, level, and autonomy was found $(\beta=1.848, p<.05)$ (see Figures 3 & 4). As with the affiliation by gender by level

interaction, females low in need for autonomy were most attracted to full-time telecommuting, and women high in need for autonomy were least attracted to the full-time telecommuting organization. Males lowest in need for autonomy were most attracted to the no-telecommuting organization and males highest in need for autonomy were least attracted to the no telecommuting organization. For the organizations that offered full- or part- time telecommuting, there was a positive relationship between autonomy and attraction for males.

When looking at the full model, all proposed regression hypotheses were significant except the need for autonomy x level moderation, hypothesis 6 (β=-.909, p=ns), which was in the hypothesized direction.

Exploratory Analyses

Image

Finding strong support for the hypothesized dependent variable attraction, Tables 9 and 10 present the results regression results for the exploratory analyses for image as a dependent variable. In Model 1, the test of main effects was significant ($F_{(4,234)}$=2.082, p<.05). While telecommuting level and image was not significant, there was a main affect of gender on attraction (β=-.120, p<.05), and a main effect of autonomy on attraction (β=.122, p<.05). These effects disappeared when the interaction terms were entered. The addition of the 2-way interaction terms into Model 2 was not significant, ($F_{(7,231)}$=1.374, p=ns, ΔR^2=.006, p=ns). The 3-way interaction terms did not significantly add to the prediction of perceived organizational image ($F_{(9,229)}$=1.188 , p=ns, ΔR^2=.005, p=ns).

Compatibility

Finding relatively little support for personality and gender on the perceived image of telecommuting organizations, next analyses of compatibility as the dependent variable were

performed. Table 9 shows the results for the regression models tested for compatibility did not reveal any significance, (Model 1 $(F(7,231)=.311$, p=ns), Model 2 $(F(9,229)=.806$, p=ns, $\Delta R^2=.003$, p=ns). Model 3, although not a significant model $(F(4,234)=.343$, p=.ns), accounted for a significant increment of variance accounted for $(\Delta R^2=.021$, p<.05) over Model 2. For Model 3, significant betas were found for the gender x level interaction ($\beta=-1.891$, p<.05), the affiliation x level interaction ($\beta=1.145$, p=.0535), and the affiliation x gender x level interaction ($\beta=1.707$, p<.05) (see Figures 5 & 6).

TABLE 4
Means, Standard Deviations, and Correlations

Variables	Means	s.d.	1	2	3	4	5	6	7	8	9	10
1. LEVEL	1.9833	.7502	1.000									
2. ATTRACT	11.2552	2.3384	-.060	1.000								
3. AUTONOMY	37.7782	4.8987	-.020	.004	1.000							
4. AFFILIATION	15.7992	2.6253	-.010	.040	.163**	1.000						
5. IMAGE	11.9498	1.4193	-.080	.380**	.117*	.063	1.000					
6. COMPATIBILITY	12.6695	2.5478	-.016	.573**	-.066	-.012	.360**	1.000				
7. GENDER [a]	1.42	.50	.211**	-.123*	.073	-.219**	-.125*	.025	1.000			
8. AGE	20.8285	1.8652	-.074	.053	.113*	-.101	.052	.084	.001	1.000		
9. MAJOR	8.5900	4.9246	.074	-.028	.032	.092	.038	-.049	-.046	.127*	1.000	
10. COLLEGE	1.7322	1.2617	-.005	-.078	-.019	.041	-.066	-.089	-.040	.055	.746**	1.000

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed); N=239 for all variables; Raw means are reported for all variables.

a. Male=1, Female=2

TABLE 5
T-Test for Personality and Gender

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	s.e.	Lower	Upper
AUT	Equal variances assumed	3.243	.073	-1.134	237	.258	-.7270	.6411	-1.9900	.5359
	Equal variances not assumed			-1.169	233.984	.243	-.7270	.6217	-1.9519	.4978
AFF	Equal variances assumed	.151	.698	3.454	237	.001	1.1611	.3361	.4989	1.8234
	Equal variances not assumed			3.450	214.606	.001	1.1611	.3366	.4977	1.8246

TABLE 6

Group Statistics for Need for Affiliation and Gender

GENDER	N	Mean	Minimum	Maximum	Range	Std. Deviation
Females	138	16.2899	8	20	12	2.5579
Males	101	15.1287	10	20	10	2.5794
Total	239	15.7992	8	20	12	2.6253

Note. The higher the score, the greater the need for affiliation.

TABLE 7

Group Statistics for Need for Autonomy and Gender

GENDER	N	Mean	Minimum	Maximum	Range	Std. Deviation
Females	138	37.4710	21	50	29	5.2766
Males	101	38.1980	30	48	18	4.3198
Total	239	37.7782	21	50	29	4.8987

Note. The higher the score, the greater the need for autonomy.

TABLE 8
ANOVA for Regression Analysis for Attraction

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.517	4	5.379	.983	.209
	Residual	1279.914	234	5.470		
	Total	1301.431	238			
2	Regression	25.991	7	3.713	.672	.348
	Residual	1275.440	231	5.521		
	Total	1301.431	238			
3	Regression	79.660	9	8.851	1.659	.050*
	Residual	1221.771	229	5.335		
	Total	1301.431	238			

a Predictors: (Constant), AUTONOMY, LEVEL TELECOMMUTING, AFFILIATION, GENDER
b Predictors: (Constant), AUT, LEVEL, AFF, GENDER, GEN_LEVL, AFF_LEVL, AUT_LEVL
c Predictors: (Constant), AUT, LEVEL, AFF, GENDER, GEN_LEVL, AFF_LEVL, AUT_LEVL, AFFGLEVL, AUTGLEVL
d Dependent Variable: ATTRACT

TABLE 9
Regression Analysis for Attraction

Variables	Model 1			Model 2			Model 3		
	B	Std. Error	β	B	Std. Error	β	B	Std. Error	β
(Constant)	11.880	1.522		14.719	4.583		12.895	4.547	
LEVEL	-.111	.207	-.036	-1.588	2.222	-.509	5.338	3.088	1.712*
GENDER	-.533	.324	-.113*	-1.070	.926	-.226	-1.031	.911	-.218
AFF	1.184E-02	.060	.013	8.895E-03	.170	.010	7.175E-02	.169	.081
AUT	4.420E-03	.032	.009	-4.835E-02	.098	-.101	-3.078E-02	.096	-.064
AFF_LEVL				1.705E-03	.084	.009	-.197	.129	-1.087
GEN_LEVL				.277	.428	.197	-4.021	1.424	-2.858*
AUT_LEVL				2.722E-02	.046	.355	-6.969E-02	.063	-.909
AFFGLEVL							.110	.059	1.223*
AUTGLEVL							6.679E-02	.032	1.848*
R	.129			.141			.247*		
R^2	.017			.020			.061		
ΔR^2	.983			.003			.041		
F for ΔR^2				.270			5.030		
N	238			238			238		

a. Statistics reflect the incremental variance accounted for when the 2-way and 3-way interactions are added to the complete specification for each model.

* p<.05 (1-tailed); **p<.01 (1-tailed).

TABLE 10
ANOVA for Regression Analysis for Image

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.473	4	4.118	2.082	.042
	Residual	462.924	234	1.978		
	Total	479.397	238			
2	Regression	19.161	7	2.737	1.374	.109
	Residual	460.236	231	1.992		
	Total	479.397	238			
3	Regression	21.378	9	2.375	1.188	.152
	Residual	458.019	229	2.000		
	Total	479.397	238			

a Predictors: (Constant), AUT, LEVEL, AFF, GENDER
b Predictors: (Constant), AUT, LEVEL, AFF, GENDER, GEN_LEVL, AFF_LEVL, AUT_LEVL
c Predictors: (Constant), AUT, LEVEL, AFF, GENDER, GEN_LEVL, AFF_LEVL, AUT_LEVL, AFFGLEVL, AUTGLEVL
d Dependent Variable: IMAGE

TABLE 11

Regression Analysis for Image

Variables	Model 1			Model 2			Model 3		
	B	Std. Error	β	B	Std. Error	β	B	Std. Error	β
(Constant)	11.160	.915		9.960	2.753		9.995	2.784	
LEVEL	-9.792E-02	.125	-.052	.536	1.334	.283	.919	1.891	.486
GENDER	-.343	.195	-.120*	6.879E-02	.556	.024	4.420E-02	.558	.015
AFF	8.705E-03	.036	.016	-3.180E-02	.102	-.059	-3.806E-02	.104	-.070
AUT	3.533E-02	.019	.122*	6.797E-02	.059	.235	7.004E-02	.059	.242
AFF_LEVL				2.104E-02	.050	.192	5.716E-02	.079	.521
GEN_LEVL				-.207	.257	-.243	-.532	.872	-.623
AUT_LEVL				-1.728E-02	.028	-.371	-4.273E-02	.039	-.918
AFFGLEVL							-2.335E-02	.036	-.427
AUTGLEVL							1.853E-02	.019	.844
R	.185*			.200			.211		
R^2	.034			.040			.045		
ΔR^2				.006			.005		
F for ΔR^2	2.082			.450			.554		
N	238			238			238		

a. Statistics reflect the incremental variance accounted for when the 2-way and 3-way interactions are added to the complete specification for each model.
* $p<.05$ (1-tailed);

TABLE 12
ANOVA for Regression Analysis for Compatibility

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.016	4	2.254	.343	.424
	Residual	1535.871	234	6.564		
	Total	1544.887	238			
2	Regression	14.402	7	2.057	.311	.475
	Residual	1530.485	231	6.625		
	Total	1544.887	238			
3	Regression	47.418	9	5.269	.806	.306
	Residual	1497.469	229	6.539		
	Total	1544.887	238			

a Predictors: (Constant), AUT, LEVEL, AFF, GENDER
b Predictors: (Constant), AUT, LEVEL, AFF, GENDER, GEN_LEVL, AFF_LEVL, AUT_LEVL
c Predictors: (Constant), AUT, LEVEL, AFF, GENDER, GEN_LEVL, AFF_LEVL, AUT_LEVL, AFFGLEVL, AUTGLEVL
d Dependent Variable: COMP

TABLE 13
Regression Analysis for Compatibility

Variables	Model 1			Model 2			Model 3		
	B	Std. Error	β	B	Std. Error	β	B	Std. Error	β
Constant	13.847	.1.667		15.795	5.020		14.270	5.034	
LEVEL	-8.56E-02	.227	-.025	-1.096	2.434	-.323	4.202	3.419	1.237
AFFILIATION	.188	.066	.007	-.249	.186	.074	-.194	.187	.133
GENDER	6.481E-02	.355	.037	7.164E-02	1.014	-.048	.129	1.009	-.038
AUT	-3.65E-02	.035	-.070	-9.760E-02	.107	-.188	-8.520E-02	.107	-.164
AFF_LEVL				-3.419E-02	.092	-.174	-.231	.143	-1.171
GEN_LEVL				.224	.469	.146	-2.981	1.577	-1.945*
AUT_LEVL				3.177E-02	.051	.380	-2.321E-02	.070	-.278
AFFGLEVL							.112	.066	1.145*
AUTGLEVL							3.696E-02	.035	.938
R			.076		.	.097			.175
R^2			.006			.009			.031
ΔR^2						.003			.021
F for ΔR^2			.343			.271			2.524*
N			238			238			238

a. Statistics reflect the incremental variance accounted for when the 2-way and 3-way interactions are added to the complete specification for each model.
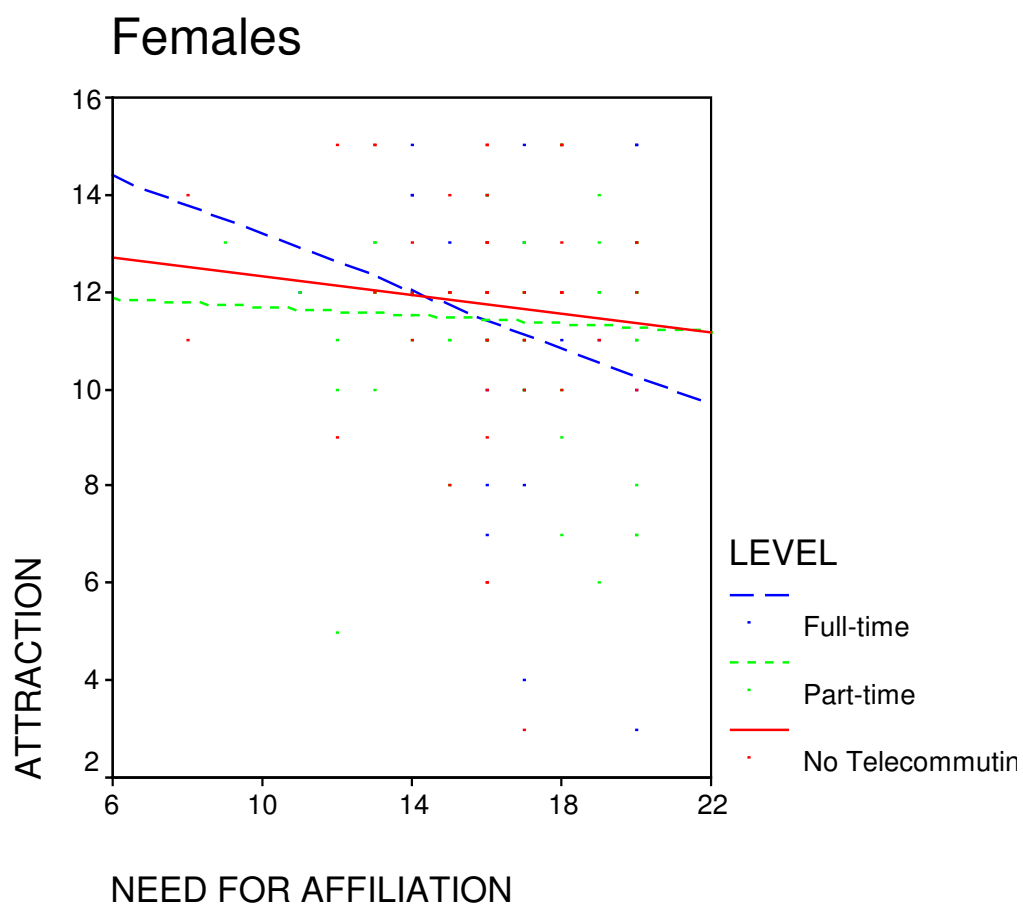
* $p<.05$ (1-tailed);

FIGURE 1: Affiliation by Level Interaction on Attraction - Females
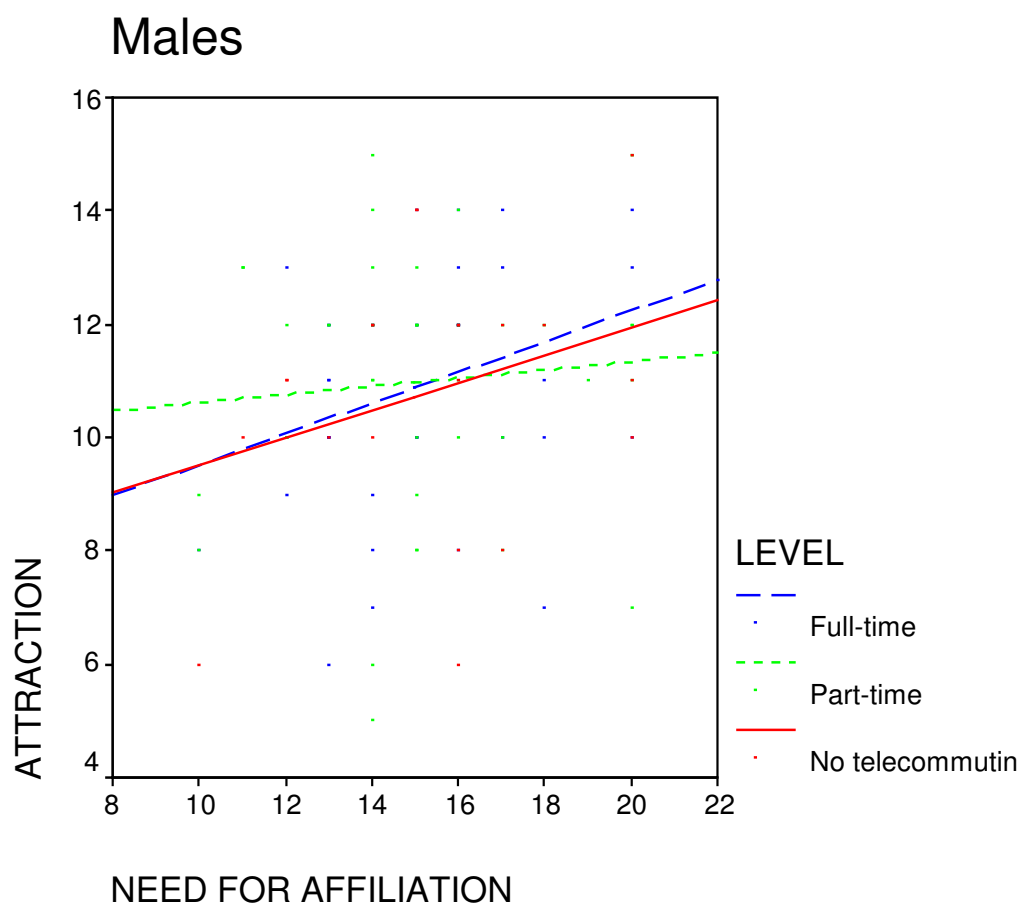
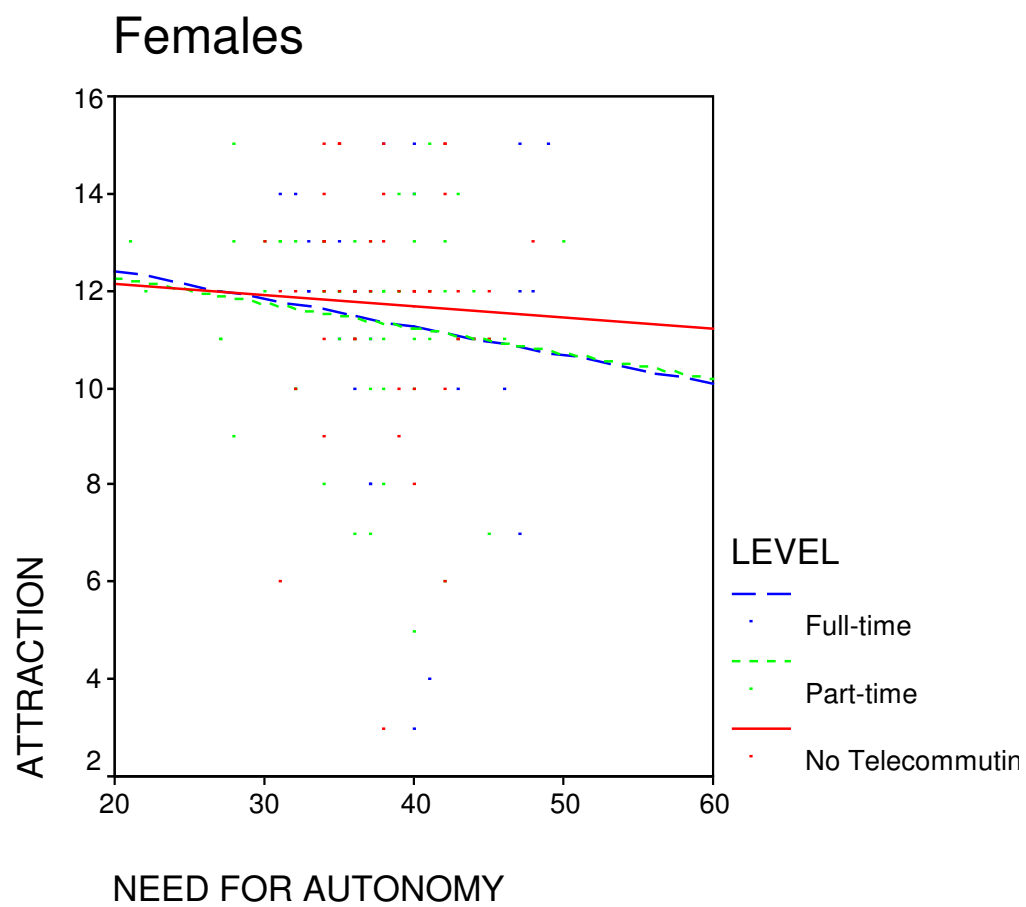FIGURE 2: Affiliation by Level Interaction on Attraction - Males

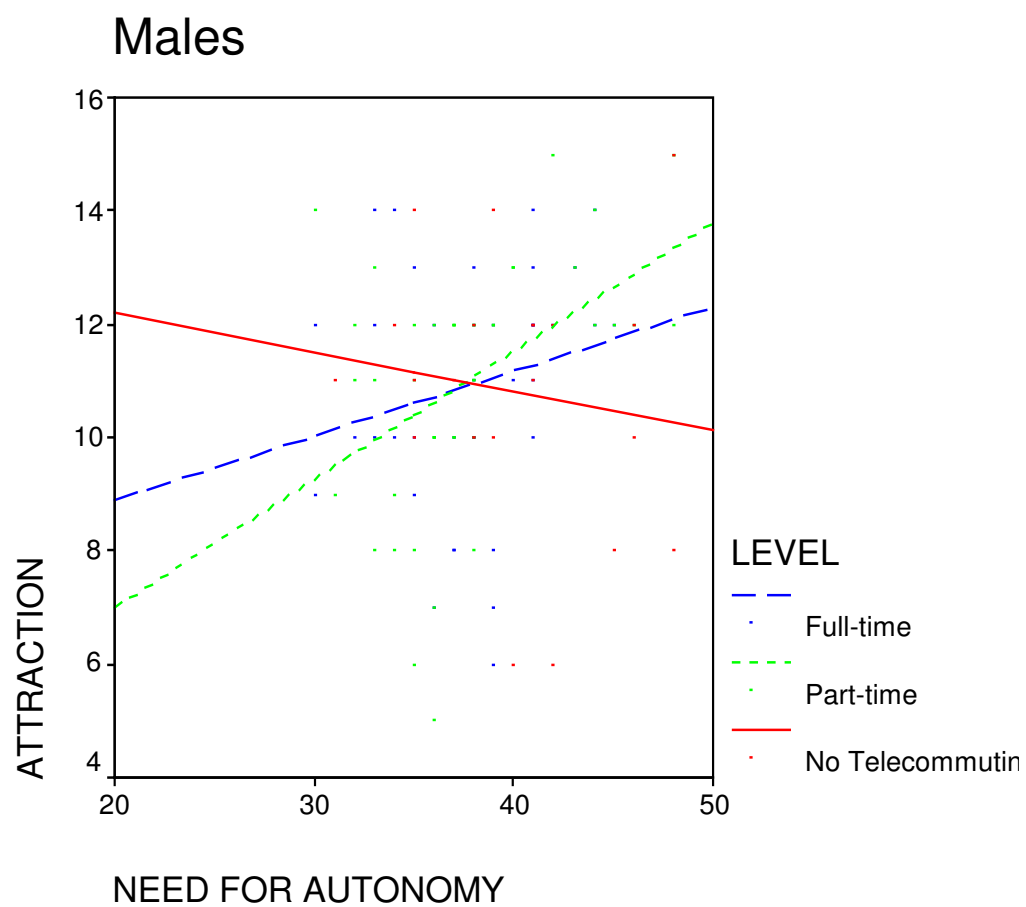FIGURE 3: Autonomy by Level Interaction on Attraction - Females

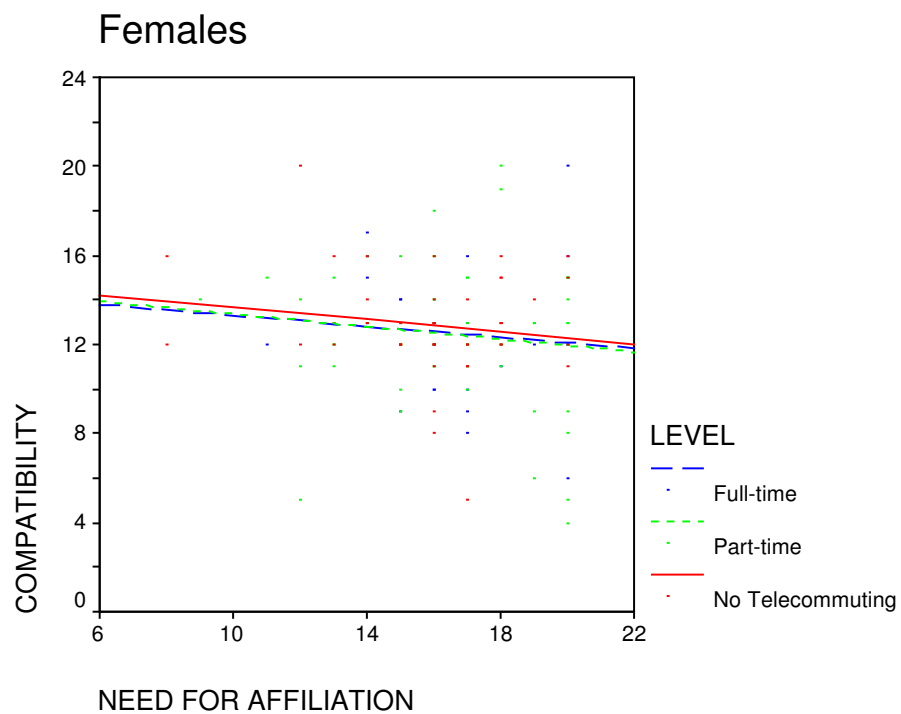FIGURE 4: Autonomy by Level Interaction on Attraction - Males

FIGURE 5: Affiliation x Level Interaction on Compatibility-Females
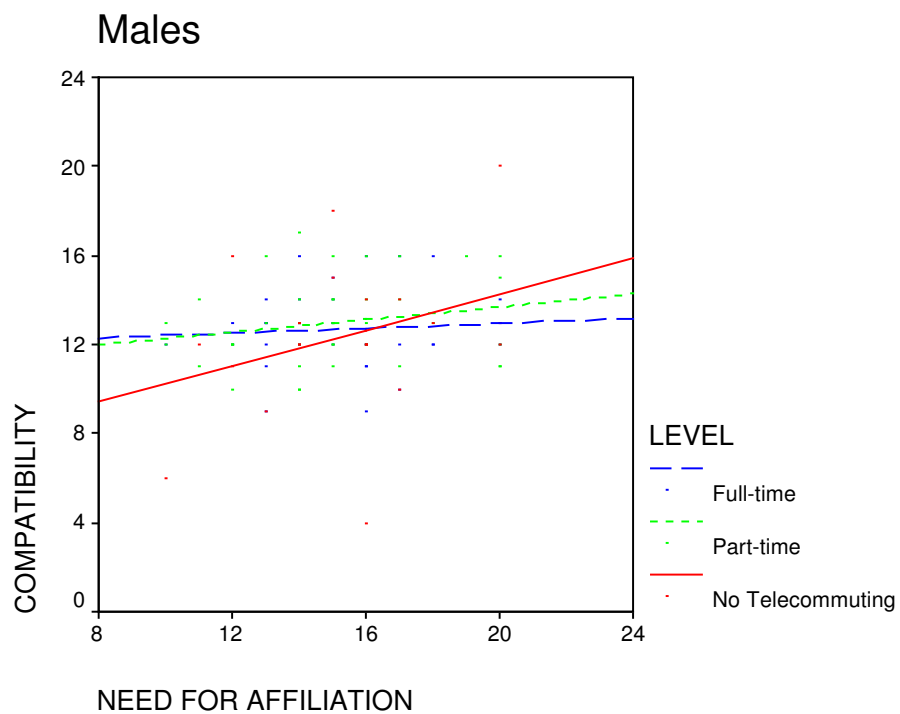
FIGURE 6: Affiliation x Level Interaction on Compatibility-Males

CHAPTER 4

DISCUSSION

This study integrated the previous research on telecommuting and organizational attraction. Following Perkins, Thomas, and Taylor's (2001) work on attraction to organizations, this study looked at applicant's perceptions of attraction, image, and compatibility. There was no evidence found that suggested attraction differences exist across age or major. Findings suggested that alone telecommuting, personality, and gender have minimal effects on applicant attraction, however significant interactions among these variables did impact applicant attraction.

Individuals were more attracted to the advertisements that offered varying levels of telecommuting. An interaction between telecommuting level and need for affiliation suggests that individuals with greater affiliation needs were more attracted to the organization that did not mention telecommuting. The organization that offered part-time telecommuting was found to be less attractive than the no telecommuting organization, yet more attractive than the full-time telecommuting. Gender was also found to interact with telecommuting level, such that women were more attracted organizations offering no telecommuting than to those offering part-time and full-time telecommuting, while men were least attracted to the no telecommuting organizations.

Support for a three-way interaction was also found between affiliation, gender, and telecommuting level offered. Women lowest in need for affiliation were most attracted to the full-time telecommuting organization. Women highest in their need for affiliation were least attracted to the no telecommuting organization. Plots of the regression lines suggest that attraction to the part-time telecommuting option was relatively stable across the various levels of

affiliation for women. The interaction between affiliation and telecommuting level was not as predictive for men. For men low in need for affiliation, organizations that offered no telecommuting were perceived as the least attractive, while men highest in need for affiliation were most attracted to the no telecommuting organization. As with women, attraction to the part-time telecommuting organization appeared stable across men regardless of their need for affiliation.

Also found, was support for a three-way interaction between need for autonomy, gender, and telecommuting level offered. This interaction was most predictive for males. Males lowest in need for autonomy were most attracted to the no telecommuting organization, while men with the highest need for autonomy were least attracted to the no telecommuting option. However, women lowest in need for autonomy rated the full-time telecommuting option as most attractive, while women high in need for autonomy rated the full-time option as least attractive.

Contrary to the literature, this study did not find a significant relationship between gender and need for autonomy. While women did appear higher than men in need for affiliation, there were no significant findings to support the hypothesis that women would be lower in need for autonomy than men. Need for affiliation and need for autonomy were positively correlated. However, it should be noted that there was a significantly broad range of women's scores on need for autonomy, as compared to that of men. This finding could be due to the sample population. The participants recruited in this study were primarily majoring in business management, marketing, and psychology. Many of these participants were interested in going to graduate or professional school or working in management positions. Because of the nature of these fields, more autonomous women may be more attracted to these majors.

This study also found that women low in affiliation were more attracted to the organization that did not offer telecommuting, than to the option of part-time telecommuting. Women high in need for autonomy were also found to be most attracted to the no telecommuting option. These unexpected findings may be explained by the significant correlation between the personality variables.

Although no hypotheses were made about compatibility and image, the non-significant models for compatibility and image also suggest that there are other variables that would account for perception of organizational image and compatibility. Although attraction to the telecommuting organizations may be predicted by gender and personality, it is important to note that the scales used offer limited reliability. A different scale may better assess these factors.

Limitations and Implications

Due to the nature of a lab study setting, participants were aware that the advertisements were simulated, and subsequently may not have reacted in the same manner as actual job applicants. Future research should look at the attraction ratings for actual job applicants in a natural setting. Other potential variables should be examined that may impact attraction, such as economic background, race, and familiarity with technology. Based on these and other variables, a potential area of interest is integration of work arrangements into diversity theory.

While this study found support for increased attraction to telecommuting, it accounted for a very low percentage of the variance. The findings suggest that there are other significant variables that account for the increased attraction to organizations that offer telecommuting. Once more is known about what attracts individuals to telecommuting, career counseling could be valuable to employees. Employees that have varying levels of the interacting factors could be

counseled in several areas of career growth, such as succession planning and employee development.

Although some form of telecommuting is available for almost every job, more than half of the subjects in the study did not perceive it as an option for their future jobs. In an annual survey of human resource professionals conducted by the Society for Human Resource Management, it was projected that 44 million workers, one third of the working population is expected to telecommute, a 4% increase over 2003. It is also expected that this number will reach 14 million by 2008 (SHRM Foundation, 2003). Telecommuting can work for a broad cross-section of workers for jobs, or part of jobs, that involves work that is independent of other people and special machinery (Caudron, 1992). Attraction to telecommuting could be improved if potential applicants were given more information about the logistics of telecommuting, and how it could be applied in their work setting.

The aim of this study was to see if telecommuting could be used by organizations to attract a diverse group of people, particularly women who handle the bulk of the family care. Women were found to be more attracted to the option of telecommuting than men. However, for both women and men personality factors were a significant predictor of attraction. It is important to consider that women and men may satisfy their personality needs in different ways, in both the home and work environment, based upon differing roles in the home environment. The constructs of autonomy and affiliation may be different for men and women, as evidenced by the absence of a gender difference in need for autonomy, as well as the presence gender differences in prediction of attraction based upon need.

Although work needs and general personality needs may vary, they may not necessarily conflict. There may be a difference in how personality traits factor into work and personal

situations. There may also be need differences in particular areas of work, such that individuals are motivated by different needs for attraction, satisfaction, and productivity. Theses needs might vary or overlap for individuals that telecommute. Future research should measure personality differences, productivity, and job satisfaction for individuals that telecommute.

Changes in technology appear to be a significant impetus in determining the face of today's workplace and, as such, when coupled with individual differences it could be important in placement decisions. Findings from this study suggest that personality tests could potentially be used in selection of successful telecommuting employees. However, before personality could be used for selection, research must be done to see if personality affects productivity. This study only looks at personality and attraction, and although a low need for autonomy person may not be attracted to the offering of telecommuting initially, the person may still be a successful telecommuter.

Finding that telecommuting can increase perceived attractiveness could help employers recruit better applicants. Support for individual difference variables of personality, gender, and race could be useful for strategic recruitment. For women, offering part-time telecommuting may be more successful at attracting individuals with varying levels of need for affiliation, thereby changing the make-up of the traditionally male/female dominated job types.

Offering telecommuting as an employment incentive, may be successful for strategic recruitment, however steps must be taken to insure that this option is viable for all employees. Individuals with personality factors that are not typically attracted to the altered work environment may need additional assistance to adjust to this option. Companies might enhance attraction to their offering of telecommuting by providing career-relevant materials and on the job career counseling. A very viable option is newcomer socialization and training.

This training can include education in areas such as setting telecommuting guidelines and finding additional activities to compensate for the lack of human contact in the home. For example, Hill and Hawkins (1996) found that some workers reported that their families struggled because the boundaries between work and family life were blurred. It has been suggested that employees have guidelines for turning off office telephone at the end of the day (Doskoch & Jones, 1997). Joice (1991) suggests that employees and supervisors should have the option to use telecommuting and employees should have some say regarding scheduling in-office presence. Another option is to participate in regular group activity outside the home, or for work groups to plan periodic meetings to discuss progress. Training could help employees learn to effectively find a work/family balance.

CHAPTER 5

CONCLUSIONS

Although organizations that offer telecommuting may attract a diverse group of employees, employers and employees that choose to use this option have several issues to consider. Employers must devise methods for evaluation, implementation, and maintaining a productive and satisfied workforce. Employees must learn to effectively balance work/family life; they must learn time management, and how to set boundaries for both aspects of their lives.

Much research is still needed to understand the factors that influence attraction to telecommuting. The increasing usage of telecommuting by organizations and employees, combined with the ever-changing world of technology, suggests that there are several areas of research to be explored.

REFERENCES

Alvesson, M, & Billing, Y.D. (1997). Understanding gender and organizations. Thousand Oaks,

CA: Sage Publications, Inc.

Anderson, J., Bricout, J.C., & West, M.D. (2001). Telecommuting: Meeting the needs of

businesses and employees with disabilities, 16, 97-104.

Andersen, S.M., Chen, S. & Carter, C. (2000). Fundamental human needs: Making social

cognition relevant. Psychological Inquiry, 22(4), 269-276.

Armabile, T.M., Hill, K., Hennessey, B.A., & Tighe, E.M. (1994). The work preference

inventory: Assessing intrinsic and extrinsic motivational orientations. Journal of

Personality & Social Psychology, 66(5), 950-967,

Armeli, S., Eisenberger, R., Fasolo, P., & Lynch, P. (1998). Perceived organizational support

and police performance: The moderating influence of socioemotional needs. Journal of

Personality & Social Psychology, 66(5), 950-967.

Barbuto, J.E., Jr., Fritz, S.M., Marx, D. (2002). A field examination of two measures of work

motivation as predictors of leaders' influence tactics. Journal of Social Psychology,

142(5), 601-617.

Barnett, R.C. & Hyde, J.S. (2001). Women, men, work, and family: An expansionist theory.

American Psychologist, (56(10),781-796.

Berry, J.O. & Rao, J.M. (1997). Balancing employment and fatherhood. Journal of Family

Issues, 18(4), 386, 17.

Boudreau, J.W., Boswell, W.R., Judge, T.A., Bretz, R.D., Jr. (2001). Personality and cognitive

    ability as predictors of job search among employed managers. Personnel Psychology,

    54(1), 25-51.

Capowski, G. (1997). Dealing with the labor shortage from the inside out. HR Focus, 74(11), 2.

Caudron, S. (1992). Working at home pays off. Personnel Journal, 71(11), 40.

Chafetz, J.S. (1990). Gender equity: An integrated theory of stability and change. Newbury

    Park, CA: Sage Publications, Inc.

Chirkov, V., Ryan, R.M, Kim, Y, & Ulas, K. (2003). Differentiating autonomy from

    individualism and independence: A self-determination theory perspective on

    internalization of cultural orientations and well-being. Journal of Personality and Social

    Psychology, 84(10, 97-110.

Christensen, K.E. & Staines, G.L. (1990). Flextime. Journal of Family Issues, 11(4), 455.

Cohen, J. & Cohen, P. (1975). Applied multiple regression/correlational analysis for the

    behavioral sciences. New York: Wiley.

Cornelius, E.T., III & Lane, F.B. (1984). The power motive and managerial success in a

    professional oriented service industry organization. Journal of Applied Psychology,

    69(1), 32-40.

Costa, P.T., Jr. (1996). Work and personality: Use of the NEO-PI-R in industrial/organizational

    psychology. Applied Psychology: An International Review, 45(3), 225-241.

Cunningham, C.H., Wakefield, J.A., Jr., & Ward, G.R. (1975). An empirical comparison of

    Maslow's and Murray's needs systems. Journal of Personality Assessment, 36(6), 594-

    596.

Dautzenberg, M. G. H (2000). The competing demands of paid work and parent care. Research

    on Aging, 22(20), 165.

Deci, E.L., & Ryan, R.M. (2000). The "what" and "why" of goal pursuits: Human needs and the

    self-determination of behavior. Psychological Inquiry, 11(4), 227-269.

Doskoch, P., & Jones, M.M. (1997). Out of the office, out of control. Psychology Today, 30(2),

    16.

Dykeman, C., & Dykeman, J.J. (1996). Big-five personality profile of executive search

    recruiters. Journal of Employment Counseling, 33(2), 77-87.

Eisenberger, R., Rhoades, L., & Cameron, J. (1999). Does pay for performance increase or

    decrease perceived self-determination and intrinsic motivation? Journal of Personality

    and Social Psychology, 77(5), 1026-1040.

Furnham, A. & Drakley, R. (2000). Predicting occupational personality test scores. Journal of

    Psychology 134(1), 103-112.

Gerstel, N. & McGonagle, K. (1999). Job leaves and the limits of the family and medical leave

    act. Work & Occupations, 26(4), 510.

Grover, S.L. & Crooker, K.J. (1995). Who appreciates family responsive human resource

    policies: The impact of family-friendly policies. Personnel Psychology, 48(2), 271-289.

Goodrich, J.N. (1990). Telecommuting in America. Business Horizons, 33(4), 31.

Hall, D.T. (1990). Promoting work/family balance: An organization-change approach.

    Organizational Dynamics, 19(3), 5-19.

Heckert, T.M. (2000). The creation of a new needs assessment questionnaire. Journal of Social

    Behavior & Personality, 15(1), 121-137.

Hill, E. J & Hawkins, A.J. (1996). Work and family in the virtual office. Family Relations, 45(3), 293.

Hill, E. J, Hawkins, A. J., Ferris, M., & Weitzman, M. (2001). Finding an extra day a week: The positive influence of perceived job flexibility on work and family life balance. Family Relations, 50(1), 49.

Joice, W.H. (1991). Home based employment-A consideration for public personnel management. Public Personnel Management, 20(1), 49.

Judge, T.A., & Cable, D.M. (1997). Applicant personality organizational culture and organization attraction. Personnel Psychology, 50(2), 359-395.

Kramer, L.A., & Lambert, S. (2001). Sex-linked bias in chances of being promoted to supervisor. Sociological Perspectives, 44(1), 11-128.

Kurland, N.B. & Bailey, D.E. (1999). Telework: The advantages and challenges of working here, there anywhere, and anytime. Organizational Dynamics, 28(2), 53.

La Guardia, J.G., Ryan, R.M, Couchman, C.E., & Deci, E.L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. Journal of Personality and Social Psychology, 79(3), 367-384.

Luzzo, D.A., & Hutcheson, K.G. (1996). Causal attributions and sex differences associated with perceptions of occupational barriers. Journal of Counseling & Development, 75(2), 124-131.

Martins, L.L., Eddleston, K.A. & Veiga, J.F. (2002). Moderators of the relationship between work-family conflict and career satisfaction. Academy of Management Journal, 45(2), 399.

McBride, M.C. (1990). Autonomy and the struggle for female identity: Implications for

counseling women. Journal of Counseling & Development, 69(1), 22-27.

Miller, J.B. (1987). Women and power. Women & Therapy, 6(1-2), 1-10.

Morrison, R.F. & Sebald, M. (1974). Personal characteristics differentiating female executive

from female nonexecutive personnel. Journal of Applied Psychology, 59(5), 656-660.

Mowday, R.T., Porter, L.W., & Stone, E.F. (1978). Employee characteristics as predictors of

turnover among female clerical employees in two organizations. Journal of Vocational

Behavior, 12(3), 321-332.

Oishi, S., Diener, E., Lucas, R. E., & Suh, E. M. (1999). Cross-cultural variations in predictors of

life satisfaction: Perspectives from needs and values. Personality and Social Psychology

Bulletin, 25, 980-90.

Ones, D.S., Viswesvaran, C., & Reiss, A.D. (1996). Role of social desirability in personality

testing for personnel selection: The red herring. Journal of Applied Psychology, 81(6),

660-679.

Perkins, L.A, Thomas, K.M., & Taylor, G.A. (2000). Advertising and recruitment: Marketing to

minorities, 17(3), 235-255.

Phillips, S.D., & Imhoff, A.R. (1997). Women and career development: A decade of research.

Annual Review of Psychology, 48, 31-59.

Powell, G.N. (Ed.). (1999).   Handbook of gender & work. Thousand Oaks, CA: Sage

Publications.

Powell, G. N., & Mainiero, L. A. (1999). Managerial decision making regarding alternative work

arrangements. Journal of Occupational and Organizational Psychology, 72(1), 41-57.

Randolph, W.A., & Sashkin, M. (2002). Can organizational empowerment work in
multinational settings? Academy of Management Executive, 16(1), 102-116.

Rau, B.L. & Hyland, M.M. (2002). Role conflict and flexible work arrangements: The effects on
applicant attraction. Personnel Psychology, 55(1), 111.

Robertson, I.T. & Smith, M. (2001). Personnel selection. Journal of Occupational and
Organizational Psychology, 74(4), 32.

Ryan, R.M. (1995). Psychological needs and the facilitation of integrative processes. Journal of
Personality, 63(3), 397-427.

Rynes, S.L. & Barber, A.E. (1990). Applicant attraction strategies: An organizational
perspective. Academy of Management Review, 15(2), 286-310.

Sato, T., & McCann, D. (2000). Sociotropy-autonomy and the Beck depression inventory.
European Journal of Psychological Assessment, 16(1), 66-76.

Schilling, S.L. (1999). The basics of a successful telework network. HR Focus, 76(6), 9.

Schroth, M. L. (2001). The Effect of Differing Measuring Methods on the Relationship of
Motives. Journal of Psychology, 119(3), 213-218.

Society for Human Resource Management. (2003). SHRM® 2003 benefits survey. Alexandria,
VA.

Stokes, G.S. & Cooper, L.A. (2001). Content/construct approaches in life history form
development for selection. International Journal of Selection & Assessment, 91(1-2),
138-151.

Stone, E.F., Mowday, R.T., & Porter, L.W. (1977). Higher order need strengths as moderators
of the job scope-job satisfaction relationship. Journal of Applied Psychology, 62(4), 66-
72.

Taniguchi, H. (1999). The timing of childbearing and women's wages. Journal of Marriage & the Family, 61(4), 1108.

Tett, R.P, & Murphy, P.J. (2002). Personality and situations in co-worker preference: Similarity and complementarity in worker compatibility. Journal of Business & Psychology, 17(2), 223-243.

Turban, D.B. & Keon, T.L. (1993). Organizational attractiveness: An interactionist perspective. Journal of Applied Psychology, 78(2), 184-193.

Van Mierlo, H., & Rutte, C.G. (2001). Autonomous teamwork and psychological well-being. European Journal of Work & Organizational Psychology, 10(3), 291-302.

Wiesenfeld, B.M., Raghuram, S. & Garud, R. (2001). Organizational identification among virtual workers: the role of need for affiliation and perceived work-based social support. Journal of Management, 27(2), 213-30.

Younes, N. (2001). Getting corporations ready to recruit workers with disabilities. Journal of Vocational Rehabilitation, 16, 89-91.

Zedeck, S. (1990). Work in the family and employing organization. American Psychologist, 45(2), 240-251.

Flexible Work Arrangements Offered by Employers

Compressed workweek

The compressed workweek refers to a 40-hours workweek that is compressed into fewer than five days. Compressed workweek schedules require workers attend work at the same time. The most common form of compressed workweek is the 4-day, 40-hr workweek (4/40) in which employees work four, 10-hr days, with either Friday or Monday off. Some organizations have adopted 3/36, 3/38, and 3/40 schedules as well.

Telecommuting

Telecommuting refers to an employment option that gives employees varying degrees of control over where their work is done. This option allows employees to work from an offsite location, usually home. Employees work in a "virtual office" where they are given the portable means to do their job wherever and whenever it makes sense. It can be fulltime, but is often one or two days a week.

Flextime

Under this option, employees can rearrange their work hours within certain guidelines. The employee is required to work a specific number of core hours at the office, such as 11am to 2pm. Although all employees must work during the core block of hours, they can vary the arrival and departure time on a daily basis. The employee could also vary the number of hours worked daily, so long as it averages to a 40-hr workweek.

Appendix B

Full Time Telecommuting Advertisement
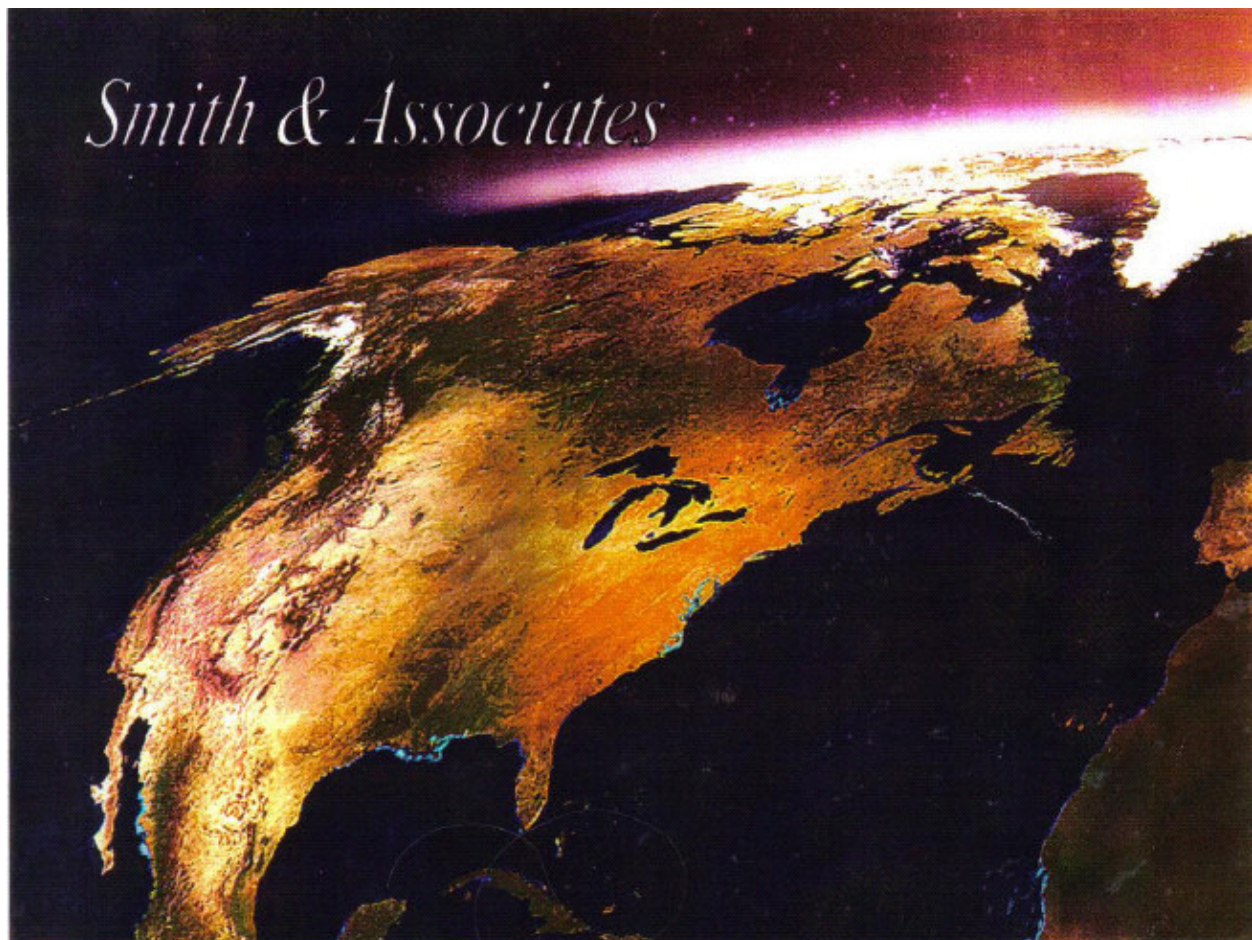
Smith & Associates

There comes a time in the progress of a company, when it stands at the threshold of an era of splendid opportunity. For Smith and Associates, that time is now. This is possible because of the quality of our employees. We offer competitive salary and benefits packages. Benefits include medical, dental, vision, life insurance, disability, 401(k), vacation and sick time. We believe our employees should have control over their careers and offer full-time telecommuting. We encourage our employees to realize their true potential. If you are serious about your career, take a serious look at **Smith and Associates**.
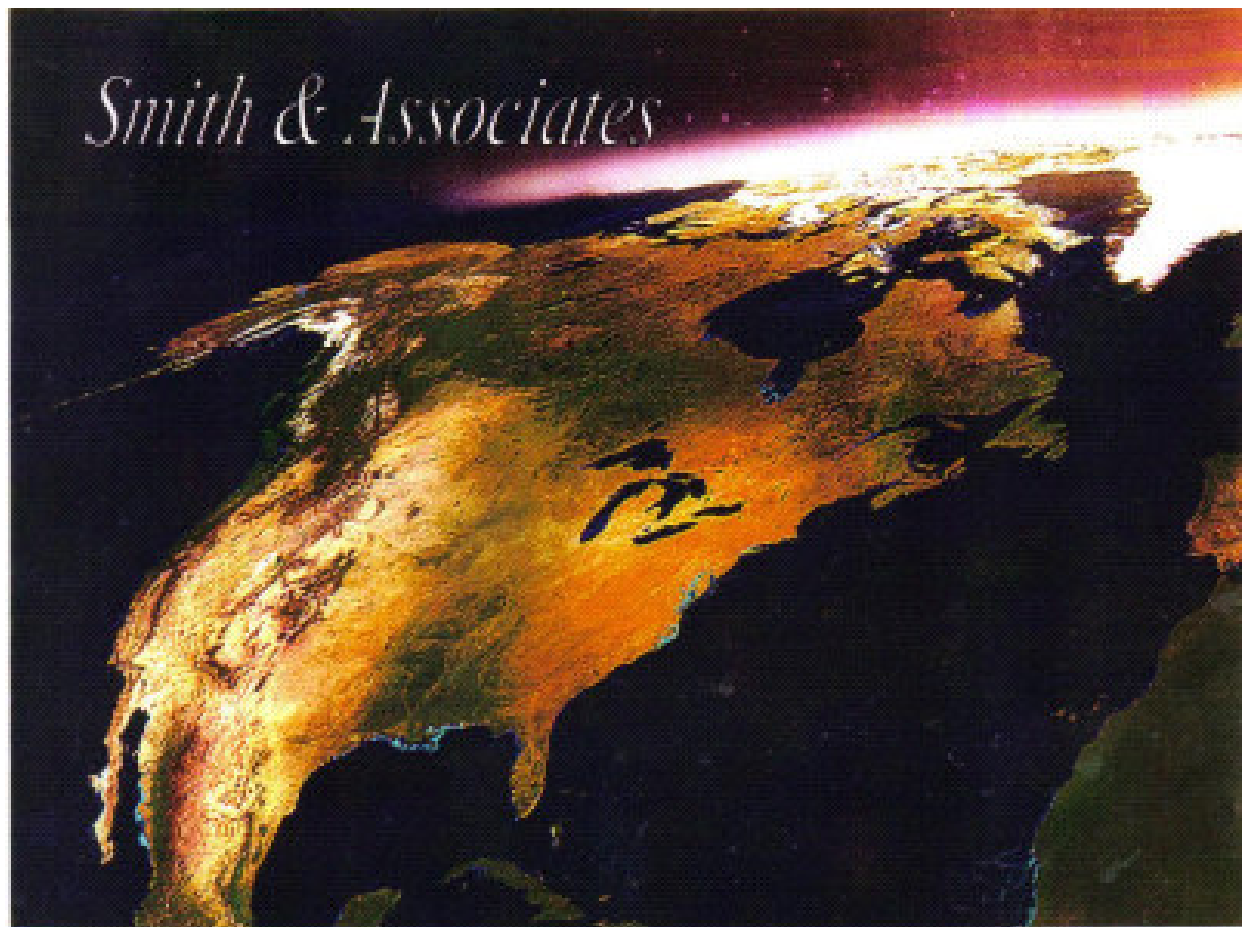
Appendix C

Part Time Telecommuting

Smith & Associates

There comes a time in the progress of a company, when it stands at the threshold of an era of splendid opportunity. For Smith and Associates, that time is now. This is possible because of the quality of our employees. We offer competitive salary and benefits packages. Benefits include medical, dental, vision, life insurance, disability, 401(k), vacation and sick time. We believe our employees should have control over their careers and offer part-time telecommuting. We encourage our employees to realize their true potential. If you are serious about your career, take a serious look at *Smith and Associates*.

Appendix D

No Telecommuting Advertisement

Smith & Associates

There comes a time in the progress of a company, when it stands at the threshold of an era of splendid opportunity. For Smith and Associates, that time is now. This is possible because of the quality of our employees. We offer competitive salary and benefits packages. Benefits include medical, dental, vision, life insurance, disability, 401(k), vacation and sick time. We believe our employees should have control over their careers. We encourage our employees to realize their true potential. If you are serious about your career, take a serious look at *Smith and Associates*.
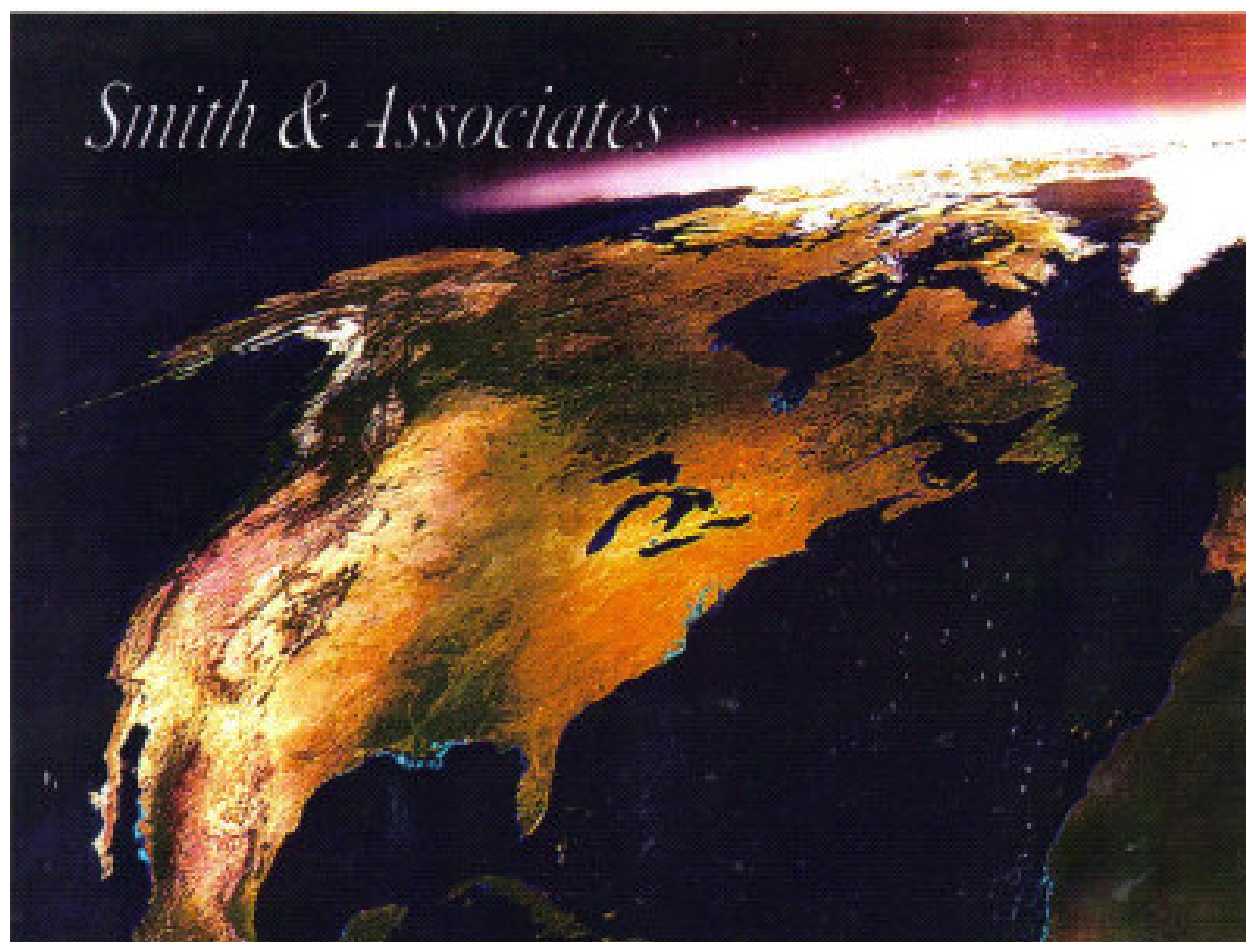
Appendix E

Employment Advertisement Questionnaire

It is very important you read each question carefully before answering it. There are no right or wrong answers. Please select the answer that best represents your feelings. Please clearly <u>mark your answers on the corresponding answer sheet</u>. To ensure your confidentiality, DO NOT put your name or any identifying marks on this questionnaire or answer sheet. DO NOT skip any questions.

Section 1- Attraction, Image, and Compatibility.
This section asks questions about your reaction to the advertisement you just saw. On the answer sheet, please indicate how much you agree with each statement using the following scale:

Strongly	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5

1. I would request additional information regarding the possibility of employment with this company.

2. I would speak to a company representative about the possibility of employment.

3. I think this organization is attractive.

4. I would not recommend this company to a friend.

5. I like this organization.

6. This company appears to care about its' employees.

7. This company portrays a favorable image.

8. This company may be a good company to work for.

9. I would feel at home working for an organization like this.

10. I would very much like to work for this organization.

11. This organization will likely meet my desires and needs.

12. I would have no problems adjusting to the organization.

Appendix F

Personality Questionnaire

Section 2

This section asks about your preferences towards general and work related issues. <u>On the answer sheet,</u> please indicate how much you agree with each statement using the following scale:

Strongly	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5

1. I prefer a job where I have a lot of control over what I do and when I do it.

2. When it comes to orders, I would rather give than receive them.

3. I enjoy having control over my own destiny.

4. I enjoy making my own decisions.

5. I try to avoid situations where some else tells me what to do

6. I prefer to avoid situations where someone else tells me what it is I should be doing.

7. Curiosity is the driving force behind much of what I do.

8. I prefer to figure things out for myself.

9. I'm more comfortable when I can set my own goals.

10. I enjoy doing work that is so absorbing that I forget about everything else.

11. I am strongly motivated by the recognition I can earn from other people.

12. I want other people to find out how good I really can be at my work.

13. To me, success means doing better than other people.

14. I believe that there is no point in doing a good job if nobody else knows about it.

15. I think being close to others, listening to them, and relating to them on a one-to-one level is one of my favorite and most satisfying pastimes.

16. Just being around others and finding out about them is one of the most interesting things I can think of doing.

17. I feel like I have really accomplished something valuable when I am able to get close to someone.

18. I would find it very satisfying to be able to form new friendships with whomever I like.

Appendix G

Answer Sheet

Put **ALL** answers on the following answer sheet.

Strongly	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5

Section 1:

	SD	D	N	A	SA
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5
10.	1	2	3	4	5
11.	1	2	3	4	5
12.	1	2	3	4	5

Section 2:

	1	2	3	4	5
1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5
10.	1	2	3	4	5
11.	1	2	3	4	5
12.	1	2	3	4	5
13.	1	2	3	4	5
14.	1	2	3	4	5
15.	1	2	3	4	5
16.	1	2	3	4	5
17.	1	2	3	4	5
18.	1	2	3	4	5

Appendix H

Background Questionnaire

Section 3:

The advertisement that you've just read indicated several benefits options. Please indicate which of the following is true of that organization.

1. This company offered full-time telecommuting.   _____
2. This company offered part-time telecommuting.   _____
3. This company's ad did not mention telecommuting.   _____

Section 4: Background Questionnaire

1. Gender   Male   Female

2. Age   _____

3. Race/Ethnicity   _____

4. Major   _____

5. Student Classification   _____

6. Do you want/have children?   Yes   No

7. Employment status   Full-time worker   Part-time worker

      Full-time student

8. Do you think you may want   Yes   No
   to telecommute?

9. Job Search Status   Currently looking

      Will be looking in the next year

      Not looking, planning to attend graduate school

      Not looking, have accepted post-graduation position

      Not looking other (please specify why)

_____

10. What post-graduation job are you seeking (have you accepted)?   _____

11. Is your desired/future job one where you could telecommute?   Yes   No