ABSTRACT

YOSHIMURA, KARI EMI. Employee Traits, Perceived Organizational Support, Supervisory Communication, Affective Commitment, And Intent To Leave: Group Differences. (Under the direction of Frank J. Smith.)

This study explored the implications a diversifying workforce may have on employee attitudes, perceptions, and intention to leave the organization. Employee responses to an annual company survey (N=2838) were analyzed to determine whether demographic groups differed in perceptions of organizational support and supervisory communication, organizational commitment, and intention to leave. Demographic groups of interest included gender, job classification, and race. Age and tenure differences were also studied. The study also examined the relationship between perceived organizational support, affective commitment, perceived supervisory communication, and intention to leave. The predictive relationship between perceived organizational support, affective commitment, perceived supervisory communication, and employee demographics with intention to leave was also explored. Results of this study suggest that gender differences are diminishing in the current workforce. Further, it suggests that meaningful group differences are not prevalent in the sample analyzed. Affective commitment, perceived organizational support, and supervisory communication were shown to be positively related. Employees who intended to leave could not be consistently identified by their attitudes, perceptions, and demographic information using discriminant function analysis.

EMPLOYEE TRAITS, PERCEIVED ORGANIZATIONAL SUPPORT, SUPERVISORY COMMUNICATION, AFFECTIVE COMMITMENT, AND INTENT TO LEAVE: GROUP DIFFERENCES

by

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BIOGRAPHY

  Kari Emi Yoshimura was born and raised in Hilo, Hawaii. In 1994, she graduated from Waiakea High School. That fall, she enrolled in the University of Washington in Seattle were she intended to major in biology. After 2 years of chemistry, physics, and biology courses, she realized that she preferred the social sciences. She graduated in 1998 with a Bachelors of Science in Psychology and a minor in Speech Communication. While trying to decide what she wanted to do in life, she continued to live and work in Seattle. She first worked as a researcher at a large public hospital. Later, she worked as a project assistant at a large engineering firm. Working at this firm made her realize the impact work and the work environment can have on a person. This positive experience inspired her to pursue a career in Industrial-Organizational Psychology.

  In the fall of 2000, Kari entered the Industrial-Organizational Psychology graduate program at North Carolina State University in Raleigh. Since then she has concentrated on her courses and teaching assignments. She has also gained practical experience through her internship at a large high-tech company. During her time in North Carolina, Kari has learned to say "y'all" and has developed an appreciation for hockey.

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INTRODUCTION

Over the past thirty years, the topic of organizational commitment has been studied, measured, dissected and discussed in various books and journals (e.g. March & Simon, 1954; Mowday, Steers & Porter, 1979; O'Reilly & Chatman, 1986; Gilbert & Ivancevich, 1999). Researchers have attempted to explain the antecedents and consequences of organizational commitment in terms of the organization and the employee.

In recent years, the nature of the employee-organization relationship has changed. Employees no longer join organizations with the intent of becoming "lifers". Amidst downsizing, mergers, and acquisitions, the employee-organization relationship has changed. The altered relationship brings to question the significance of organizational commitment. Meyer and Allen (1997) present three reasons why commitment, even in these changing conditions, is important:

> *"First, organizations are not disappearing…they must still maintain a core of people who <u>are</u> the organization…Second, organizations that contract out work to other companies or individuals will still be concerned about commitment of these others…Third, commitments develop naturally" (pg. 5).*

The current amount of research focusing on organizational commitment indicates that the topic is still of interest to many. Researchers continue to study organizational commitment as an indicator and predictor of employee behavior (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

In addition to the changing nature of work, changes in the current workforce composition warrant research conducted on both a group and individual level. There are a growing numbers of women, minorities, and older employees in the workplace (Department of Labor, 2003). According to the Department of Labor, Bureau of Labor Statistics, the number of women in the work force has increased 15.5 % between 1990 and 2000. During that same period, the number of workers over the age of 55 has increased 21%. This age group is projected to increase 46.6% by 2010. The number of Asian and Pacific Islanders in the work force has increased 43.7%, and the number of Hispanic workers has risen 43.4% between 1990 and 2000.

The numbers of women and minorities in science and engineering fields have also increased over a 20 year period (National Science Foundation, 2002). Between 1980 and 2000, the numbers of women and blacks in the science and engineering fields have doubled. The number of Hispanic employees has also increased by more than 50 percent. Foreign-born employees also make up a large proportion of employees (increase from 11.2 percent to 19.3 percent).

These statistics suggest several workforce changes. First, the number of women in the workforce will increase. Second, the number of older workers will increase. Third, the number of ethnic minorities in the workforce will increase. These trends raise the question: How will a changing workforce affect organizations? One answer may be that there will be no impact. Another answer may be that organizations will have to change or adapt policies and practices to accommodate a diversified resource pool.

employee demographics with intention to leave. Together these objectives explore the implications a diversifying workforce may have on employee attitudes, perceptions, and intention to leave the organization.

CONSTRUCTS

Quirke (1992) argues that communication in an organization is extremely important to the success of the organization. According to Quirke (1992), organizational communication is based on "the relationship between individuals, between managers and the managed" (p. 255). Specifically, this study will look at communication by managers, or supervisors, as perceived by the managed, or subordinates. As such, supervisory communication is defined as communication between a supervisor and a subordinate. Mueller (2002) suggests that supervisory communication includes aspects such as listening to subordinate problems and being open to new ideas. Research by Harcourt, Richerson, and Wattier (1991) also found that the type of information provided is important to employees.

Most research on perceived organizational support applies the definition provided by Eisenberger, Huntington, Hutchinson, and Sowa (1986). Under this definition, perceived organizational support is employees' "global beliefs concerning the extent to which the organization values their contributions and cares about their well-being" (p. 501).

Several conceptualizations of organizational commitment have emerged over the years. In the broadest sense, commitment can be conceptualized as a psychological state (Meyer and Allen, 1997). Most conceptualizations of organizational commitment include

an affective component. Organizational commitment, as defined by Porter, Steers, Mowday, and Boulian (1974), is the strength of an individual's identification with and involvement in a particular organization.   They describe commitment as a unidimensional concept composed of three elements:

> *" (a) a strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; (c) a definite desire to maintain organizational membership." (p. 604)*

Mayer and Schoorman (1992) proposed a two-component model of organizational commitment. In their model, organizational commitment was composed of continuance commitment and value commitment. Value commitment is described as an affective type of commitment. Mayer and Schoorman (1992) define value commitment as "a belief in and acceptance of organizational goals and values and a willingness to exert considerable effort on behalf of the organization" (p. 673). This definition of value commitment is almost identical to the first two elements of the definition of commitment provided by Porter, et al. (1974). Continuance commitment is defined by Mayer and Schoorman (1992) as "the desire to remain a member of the organization" (p. 673). This definition is similar to the third element of the Porter, et al. (1974) definition of organizational commitment. Factor analysis of data collected as part of a longitudinal field study supported this two-factor model of organizational commitment (Mayer & Schoorman, 1992; Mayer & Schoorman, 1998).

Other models have used the terms attitudinal commitment and calculative commitment (Meyer & Allen; 1997, Randall & O'Driscoll, 1997). These terms

correspond with affective commitment and continuance commitment respectively. Aven, Parker, and McEvoy (1993) define attitudinal commitment as "a form of moral involvement that represents a positive and intense involvement and attachment to, and identification with the goals and values of the organization" (pg. 64). Based in this definition, attitudinal commitment can be interpreted to be similar to or synonymous with affective commitment. Both attitudinal commitment and affective commitment address the employee's emotional attachment to the organization. Continuance commitment and calculative commitment are also similar in that in both cases the employee weighs options outside of the organization to determine his or her commitment to the organization.

Meyer and Allen (1991) proposed a three-dimensional theory of organizational commitment. According to this theory, organizational commitment can be divided into three distinct components: affective, normative, and continual commitment. Affective commitment is the emotional attachment a person has towards the organization. Normative commitment is the obligation a person feels towards the organization. This type of commitment considers the influence internal, normative ideals and standards have on employee commitment. Continual commitment is when a person feels that he or she has to stay with the organization, because there are no better options, or to protect accumulated benefits (such as stock options, pension plans, and other vested interests). This type of commitment is based on how costly of leaving the organization would be to an individual. Underlying all dimensions of commitment is the idea that commitment is something which "binds" the individual to the organization (Meyer & Allen, 1997).

Of the models mentioned above, the three-component model of commitment has received the most support. For example, Hackett, Bycio, and Hausdorf (1994) performed a factor analysis on data collected from 2,301 nurses which supported the presence of 3 commitment factors. Similarly, factor analysis of three separate samples by Dunham, Grube, and Castaneda (1994) supported the three-component model of organizational commitment. Additionally, the analysis by both Hackett, et al.(1994) and Dunham, et al. (1994) found continuance commitment to be a bi-dimensional factor. Addressing the myriad of definitions, O'Reilly and Chatman (1986) point out that the "individual's psychological attachment to an organization- the psychological bond linking the individual and the organization" (p. 492) is a recurring theme across various studies. This psychological attachment is most similar to affective commitment.

Intention to leave refers to an individual's intention to leave his or her current organization. This concept is also referred to as turnover intention, intention to quit, or phrased oppositely as intention to remain. In research, this intention is related to but distinct from withdrawal behaviors. Intention to leave is also distinct from actual turnover.

LITERATURE REVIEW

Perceived Supervisory Communication

Supervisory communication has received limited attention in psychological literature. Past research has looked at supervisory communication as it relates to subordinate satisfaction, performance, and commitment.

Alexander, Helms, & Wilkins (1989) found supervisory communication was positively related to subordinate performance and job satisfaction. Their study addressed seven types of supervisor communication, including information sharing, feedback, and participation. In this study, surveys were administered to vocational rehabilitation counselors.

Communication openness was studied by Young, Worchel, and Woehr (1998). Communication openness refers to subordinate perceptions of management's openness to input and openness with information. Employees of a public service agency were surveyed. The study found that communication positively correlated with commitment, job satisfaction and satisfaction with leadership. In this study, organizational commitment was defined as an "identification with and interest in the overall effectiveness and success of the organization." Given the definition, organizational commitment in this study can be considered to be affective.

Trombetta and Rogers (1988) studied communication in terms of adequacy of information, participation in decision making, and communication openness. This study was based on data collected from questionnaires administered to nurses. Researchers found positive correlations among these communication concepts. Further, the communication concepts were all positively correlated with attitudes such as job and leadership satisfaction. Although all three communication concepts were positively correlated with organizational commitment, only adequacy of information was correlated at the p=.05 level.

The effect of subordinate characteristics on supervisory communication is not clear. Lind (2001) studied gender differences in communication channels and found some gender differences. Specifically, males and females differed in their uses of e-mail as a channel of communication. Lind (2001) also found gender differences in satisfaction with information sent and in information equivocality. These results were based on survey data collected from white-collar workers in a corporation. While Lind (2001) did not find gender differences for all channels of communication, the findings still suggest that gender differences may exist in communication.

Miles, Patrick, and King (1996) found supervisors and hourly workers in a manufacturing company differed in ratings of supervisory communication. Multi-variate analysis of covariance showed that supervisory-level employees reported significantly higher levels of supervisory communication than did hourly workers. Miles, et al. (1996) also found the relationship between supervisor communication and job satisfaction to be moderated by job position. This finding suggests that incumbents of different job positions may differ in perceptions of communication.

Trombetta and Rogers (1988) studied communication in a sample of nurses. They found positive but statistically insignificant (at the $p= .05$-level) correlations between age and adequacy of information, participation in decision making, and communication openness. This may suggest that age groups do not differ in perceptions of communication.

Perceived Organizational Support

Organizational support is studied as something that is perceived by an employee. This is a perception or judgment of how much support an employee feels or thinks an organization provides to him or her. In other words, perceived organizational support focuses on the organization's commitment to the employee. This construct is distinct from organizational politics and procedural and distributive justice (Andrews & Kacmar, 2001).

Previous studies have examined the relationship between perceived organizational support and various attitudes and behaviors. Research has found that perceived organizational support is positively related to job attendance and performance (e.g. Eisenberger, Fasolo & Davis-LaMastro, 1990, Randall, Cropanzano, Bormann & Birjulin, 1999), job satisfaction (e.g. Eisenberger, Cummings, Armeli & Lynch, 1997; Randall, et al., 1999), and organizational citizenship behavior (e.g. Moorman, Blakely & Niehoff, 1998; Randall, et al., 1999; Kaufman, Stamper & Tesluk, 2001; Bishop, Scott & Burroughs, 2000). Job insecurity was found to be negatively related to perceived organizational support (Rosenblatt and Ruvio,1996).

Allen (1995) studied organizational communication as an antecedent to perceived organizational support. Similarly, Hutchinson and Garstka (1996) studied a model where goal-setting and feedback were antecedents to perceived organizational support. Both goal-setting participation and feedback from supervisors were positively related to levels of perceived organizational support. Goal-setting participation and feedback both relate to supervisory communication. Feedback can be classified as a type of supervisory

communication as it deals directly with the communication of performance information from the supervisory to the subordinate. Goal-setting participation relates to supervisory communication in that it addresses whether employees feel they have the opportunity to express their opinions, whether supervisors solicit employee input, and whether employees feel they have a say in work objective formulation.

Rhoades and Eisenberger (2002) performed a meta-analysis of the antecedents and consequences of perceived organizational support and noted the role of demographic variables as "possible third-variable explanations between antecedents and POS" (p. 699). Demographic variables considered in their meta-analysis included gender, tenure, age and education.

Research on gender differences in perception of organizational factors is mixed. Studies specifically addressing gender differences in perceived organizational support are scarce. One of the only studies of gender differences in perceived organizational support was conducted by Amason and Allen (1997). Using regression analysis, they did not find gender differences in levels of perceived organizational support; however, gender was found to moderate the relationship between POS and employee perceptions of communication. Their study surveyed university employees and engineering firm employees.

Similarly, Lee and Farh (1999), and a meta-analysis by Aven, Parker, and McEvoy (1993) did not find gender differences in perceptions of organizational justice. In contrast, Sweeney and McFarlin (1997) did find gender differences in employees' perceptions of organizational justice.

While clear gender differences in perceptions have not been found, research suggests that gender is related to perceived organizational support. Meta-analysis by Rhoades and Eisenberger (2002) found a significant negative relationship between gender and perceived organizational support. In this analysis, gender was dummy coded (0=male, 1=female). This relationship implies that level of perceived organizational support is higher in males. Additionally, their meta-analysis showed a positive relationship between age, tenure, and education antecedents with perceived organizational support.

<center>Organizational Commitment</center>

The relationships between organizational attachment and concepts such as organizational support, organizational communication, and personal and situational characteristics have been the topic of numerous studies. Although research has yielded mixed support for the precise relationship between organizational commitment and employee behavior, the topic is still of interest to many researchers (e.g. Meyer, Stanley, Herscovitch, & Topolnytsky, 2001).

Organizational commitment has been linked to such concepts as job satisfaction, absenteeism, organizational citizenship behavior (e.g. Randall, Fedor & Longenecker, 1990; Lee, Carswell, & Allen, 2000; Clugston, 2000). While these topics have received much attention, relatively little research has focused on the relationship between supervisor communication and commitment.

Trombetta and Rogers (1988) found that communication positively related to organizational commitment. This study found that information adequacy, participation in

decision-making, and communication openness all related positively with organizational commitment. Information adequacy was found to be predictive of organizational commitment. Additionally, employee age and information adequacy predicted organizational commitment. The effect of information openness on organizational commitment was found to be mediated by job satisfaction.

Results found by Putti, Aryee, and Phua (1990) found supervisor communication to relate positively with organizational commitment. In this study, organizational commitment was defined using the Porter et al (1974) definition. Employees of an engineering firm rated supervisor communication in terms of honesty, openness, praise, and satisfaction.

Similarly, Young, Worchel, and Woehr (1998) found communication openness to relate positively with organizational commitment. This positive relationship has been found in several studies. Research by Bruning and Snyder (1983) found a positive relationship between supervisor's communication and organizational commitment. Johlke and Duhan (2001) found communication quality to be positively related to organizational commitment. This relationship was mediated by subordinate satisfaction with communication.

Eisenberger, et al. (1986) approach commitment from a social exchange perspective. Under this framework, the employee exchanges commitment to the organization for support from the organization. Numerous studies have examined the relationship between perceived organizational support and organizational commitment (e.g. Shore & Wayne, 1993; Hutchison & Grastka, 1996; Eisenberger, et al., 2001).

Researchers have looked to social exchange theory to explain the reciprocal nature of organizational commitment and perceived organizational support. Eisenberger et al. (1986) describe the relationship between the employee and the organization using a social exchange model. They suggest that the employee's affective commitment to the organization is influenced by their perception of the organization's commitment to them. This relationship stipulates two premises: first that the organization is personified, and second that work is considered to be a type of social exchange. The personification of the organization is based on Levinson's (1965) proposal that work done by agents of the organization be representative of the organization itself. For example, a pay raise issued by an employee's supervisor is seen as a pay raise from the organization.

Numerous studies have shown a positive relationship between perceived organizational support and organizational commitment. Bishop, et al. (2000) found a strong correlation between perceived organizational support and organizational commitment in a study of automotive production workers. Studies by Hutchison and Gratska (1996), Shore and Tetrick (1991), Eisenberger, et al. (1990), Settoon, Bennett, and Linden (1996), Randall, et al. (1999), Tansky and Cohen (2001), and Whitener (2001) all found a strong correlation between perceived organizational support and affective commitment. Rhoades and Eisenberger's (2002) meta-analysis found a positive relationship between perceived organizational support and affective commitment.

Perceived organizational support was found to moderate the relationship between feedback and goal-setting with organizational commitment (Hutchinson & Garstka, 1996). In this study, employees from a community college, a energy/petroleum

transportation company, and a state university (N= 337) were surveyed. Structural equation analysis was used to study the relationship between goal setting, feedback, perceived organizational support, and organizational commitment. Analysis showed that feed back and goal setting were not direct antecedents of organizational commitment. Instead, analysis suggested that feedback and goal setting influenced perceived organizational support which in turn has a direct effect on organizational commitment. In this study, organizational commitment was defined using the Mowday et al. (1982) definition.

The research on gender differences in employee perceptions and attitudes has yielded mixed results. Mathieu and Zajac (1990) performed a meta-analysis and found a weak relationship between gender and commitment. They found women where slightly more committed to the organization than men; however they concluded that the relationship was inconsistent across studies.

Bruning and Snyder (1983) studied organizational commitment in a sample of 583 social service employees. Multiple regression analysis did not find statistically significant gender differences in levels of organizational commitment. Their analysis found a non-significant interaction between gender and position. Male non-supervisory employees had a stronger supervisory communication and organizational commitment correlation (r=0.59) than non-supervisory females (r=0.33), supervisory females (r=0.35), and supervisory males (r=0.36).

Aven, et al. (1993) studied the relationship between gender and organizational commitment. Specifically, Aven, et al. (1993) studied gender and attitudinal

commitment. They performed a meta-analysis of 27 studies (N=14,081) and did not find a relationship between gender and attitudinal commitment. Moreover, they found that job type and instrument used did not moderate the relationship between gender and attitudinal commitment.

Dodd-McCue and Wright (1996) found gender differences in attitudinal commitment. Their study used the definition provided by Aven et al. (1993). Dodd-McCue and Wright (1996) sampled accountants (N=248) and found that men were significantly more committed than women to their organizations. In this study, attitudinal commitment was studied in terms of organizational involvement and job satisfaction.

Finegold, Mohrman, and Spreitzer (2002) surveyed technical workers (N=2946) to study age as a moderator of the relationship between antecedent variables and organizational commitment and intention to remain. Age brackets used in this study were under 30, 31 to 45, and over 45. Gender composition differences were found across age groups; specifically, the under 30 group had the highest percentage of females, while the over 45 group had the lowest. Antecedents studied included satisfaction with job security, skill development opportunities, and work-life balance. Organizational commitment was defined using the Mowday, et al. (1979) definition. Correlational analysis showed age groups differed in the relationships between antecedent variables and organizational commitment and intention to remain.

Contrary to the results of Finegold, et al. (2002), research by Morrow and McElroy (1987) found a positive relationship between age and organizational

commitment. Steers (1977), Meyer and Allen (1984), and Tansky and Cohen (2001) also found a positive relationship between age and organizational commitment.

The study by Morrow and McElroy (1987) surveyed public agency employees (N=2200) to explore work commitment and job satisfaction across career stages. Career stage was operationalized by age, organizational tenure, and position tenure. Work commitment was studied in terms of job involvement, organizational commitment, work ethic endorsement, and intention to remain. For the purposes of this study, organizational commitment was defined using the Mowday, et al. (1979) definition. Multivariate analysis showed that organizational commitment increased across three age groups. Organizational commitment was lowest in the under 31 year group and highest in the over 44 year group.

Steers (1977) studied organizational commitment in hospital employees (N=382). Multiple regression analysis showed that age was significantly and positively related to organizational commitment.

Research by Tansky and Cohen (2001) found that age was significantly and positively correlated to organizational commitment. In this study, organizational commitment was defined using the Mowday, et al. (1979) definition. Age was analyzed as a continuous variable.

Studies addressing the relationship between organizational commitment and organizational tenure have yielded inconsistent results. Meyer and Allen (1984) found a positive correlation between affective commitment and tenure. Research by Morrow and McElroy (1987) did not find a positive relationship between organizational tenure and

organizational commitment. Organizational tenure was studied over three stages: establishment (2 years or less with the organization), advancement (over 2 and up to 10 years with the organization), and maintenance (over 10 years with the organization). Using multivariate analysis, organizational commitment was found to be lowest in the advancement group.

Beck & Wilson (2000) found that organizational commitment decreased as tenure increased. They also found a high correlation between age and tenure. Moreover, the effect of age on commitment was not significant if tenure was controlled for. Taylor, Audia, & Gupta (1996) studied managers and also found organizational commitment to relate negatively to tenure.

Gregersen (1993) found different commitment patterns across three stages of tenure. Organizational commitment was defined using the Mowday (1979) definition. Similar to the Morrow and McElroy (1987) study, organizational tenure was studied across three stages. Gregersen (1993) used the same terminology to label the stages, but operationalized the advancement and maintenance stages differently. In this study, advancement is operationalized as over 2 and less than 8 years with the organization and maintenance is operationalized as over 8 years with the organization. Multivariance analysis showed that establishment and maintenance groups differed significantly in levels of commitment.

Research on organizational position did not find significant differences in levels of commitment (Bruning & Snyder, 1983). Additionally, meta-analysis by Cohen and

Hudecek (1993) reported no differences in levels of commitment between managers and clerical workers in low-status, non-professional occupations.

Lynn, Cao, and Horn (1996) found different commitment patterns in males and females across tenure stages. This may suggest and tenure or age and gender interaction.

Intention to Leave

Various antecedents have been studied in relation to intent to leave. Research has tried to predict intention to leave by studying variables such as job satisfaction, organizational commitment, and procedural justice (e.g. Tett & Meyer, 1993). Bishop et al. (2000) found a negative correlation between perceived organizational support and employees' intent to leave the organization. Study participants were employees of an automotive manufacturing plant. Perceived organizational support was measured using the Eisenberg, et al. (1990) Survey of Perceived Organizational Support (short version). Intent to quit was measured by three questions assess employees' desire to look for other employment opportunities, thoughts of quitting, and desire to work for another company.

Results from a meta-analysis conducted by Rhoades and Eisenberger (2002) found a negative correlation between perceived organizational support and employee withdrawal behaviors and turnover intentions. Similarly, they found a positive relationship between perceived organizational support and employee's desire to remain with the organization.

Mathieu and Zajac's (1990) meta-analysis of organization found a negative relationship between organizational commitment and several withdrawal behaviors.

They found organizational commitment negatively correlated with employees' intention to search for job alternatives. They also found a negative correlation with an employee's intention to leave his/her current job.

Research found affective organizational commitment related negatively with turnover intentions (Steers, 1977; Eby, Freeman, Rush, & Lance, 1999; Randall, et al., 1999). Steers (1977) also found a positive relationship between organizational commitment and desire to remain and intent to remain. Meyer, Allen, and Smith (1993) found a negative correlation between organizational commitment and intention to leave the organization.

Lum, Kervin, Clark, Reid, and Sirola (1998) studied various antecedents to intention to leave. Their study found that of all antecedents considered, commitment had strongest effect on intention to leave. Organizational commitment, defined by the Porter et al. (1974) definition, negatively related to intention to leave.

In the model researched by Bishop, et al. (2000), commitment was a mediator between perceived organizational support and intent to leave and organizational citizenship behaviors.

Sweeney and McFarlin (1997) found that men reported a higher intention to remain with the organization than reported by women. These results are based on data originally collected as part of a Federal employee survey. Using regression analysis, Sweeney and McFarlin (1997) also found gender, pay level, and tenure to be significant predictors of intent to leave. The relationship between perceptions of justice and intent to leave was found to be moderated by gender.

Chen and Fransesco (2000) found that gender moderated the relationship between organizational commitment and intent to leave. Rosin and Korabik (1995) did not find gender differences in the relationship of antecedents such as job satisfaction and organizational commitment, with intent to leave. Lynn, Cao, and Horn (1996) found different organizational turnover intentions and career stage were positively related for men. They did not find this relationship in women.

Russ and McNeilly (1995) surveyed sales representatives and found gender and experience moderated the relationship between organizational commitment and intent to leave. In this study, organizational commitment was defined and measured according to previous research by Mowday, et al. (1979). Intention to leave was measured using 3 survey items that were not published.

Morrow and McElroy (1987) found a positive relationship between age and intentions to remain with an organization. Intention to remain was measured using a single item which asked respondents the probability that they would remain with the organization. They also found a positive relationship between tenure and intentions to remain with an organization.

Research has addressed differences in groups defined by various personal characteristics, including gender, ethnicity, age, tenure, and organizational position. Excluding gender, limited research has been conducted on whether these characteristics moderate the relationships between affective commitment, perceived organizational support, perceived supervisory communication, and intent to leave. Most research in this area has focused on one or two variables rather than a more complete profile of the

individuals. While it may be informative to look for specific trait differences, it may also be helpful to look at collective differences as individuals can often be simultaneously classified by demographics.

RESEARCH QUESTIONS AND HYPOTHESES

Group Differences

Collectively, research questions 1 through 3 ask whether groups, defined by employee characteristics, have significantly different attitudes and perceptions. These questions will help to identify which, if any, employee characteristics are related to differences in attitudes or perceptions.

Research question 1: Do groups differ in ratings of perceived supervisory communication?

Research question 1a: Do gender groups differ in ratings of perceived supervisory communication?

Although a study by Amason and Allen (1997) did not find gender differences, gender groups are hypothesized to differ in ratings of supervisory communication. Their sample was drawn from three organizations, a university and two engineering firms. Given the small size of the engineering sample (n=113) the results may not generalize to a firm-wide sample.

Alexander, et al. (1989) found that the gender and caseload covariance coefficient was significant in regression equations of both performance measures and job satisfaction. Although gender is not analyzed as a main effect, the significance covariance suggests that gender differences may be present.

<u>Research question 1b</u>: Do age groups differ in ratings of perceived supervisory communication?

Past research has not studied the relationship between age and perceived supervisory communication. In the absence of past research, it is hypothesized that age groups do not differ in ratings of perceived supervisory communication.

<u>Research question 1c</u>: Do tenure groups differ in ratings of perceived supervisory communication?

The relationship between tenure and perceived supervisory communication has not been addressed in prior research. As this question is exploratory in nature, it is hypothesized that tenure groups will not differ in ratings of perceived supervisory communication.

<u>Research question 1d</u>: Do ethnic groups differ in ratings of perceived supervisory communication.

Past research has not addressed race or ethnic differences in levels of perceived supervisory communication. This question poses a new research question and as such, it is hypothesized that there is no difference in ratings of perceived supervisory communication across race/ ethnic groups.

<u>Research question 1e</u>: Do occupational groups differ in ratings of perceived supervisory communication?

Consistent with research by Miles et al. (1996) occupational groups are expected to differ in ratings of perceived supervisory communication.

Research question 2: Do groups differ in levels of perceived organizational support?

<u>Research question 2a</u>: Do gender groups differ in levels of perceived organizational support?

Research by Amason and Allen (1997) suggests that men and women do not differ in perceptions of organizational support. Their sample was drawn from three organizations, a university and two engineering firms. Although the engineering sub-sample was small (n=113) which may limit the generalizability of the study, the study provides evidence that gender differences in levels of perceived organizational support do not exist.

<u>Research question 2b</u>: Do age groups differ in levels of perceived organizational support.

As has been found in prior studies, it is expected that age groups differ in levels of perceived organizational support. Older employees are hypothesized to report higher levels of perceived organizational support.

<u>Research question 2c</u>: Do tenure groups differ in levels of perceived organizational support?

Consistent with past research, it is expected that tenure groups will differ in perceived organizational support. Specifically, older employees are expected to report higher levels of perceived organizational support.

<u>Research question 2d</u>: Do ethnic groups differ in levels of perceived organizational support?

Past research has not examined whether race or ethnic groups differ in levels of perceived organizational support; however, relevant research has been conducted by Mor Barak, Cherin, and Berkman (1998). Mor Barak, et al. (1998) found race/ethnicity

differences in perceptions of organizational variables such as fairness and inclusion. Their study compared responses from respondents classified as African American, Asian American, Caucasian, Hispanic, or Other. As such, it is expected that race/ethnic groups will differ in their levels of perceived organizational support.

Research question 2e: Do occupational groups differ in levels of perceived organizational support?

Research on the work attitude differences across occupational groups is especially scarce. Armstrong-Stassen (1998) found organizational level differences in employee perceptions of procedural justice. Similarly, it is hypothesized that occupational groups will differ in levels of perceived organizational support.

Research question 2f: Is there an interaction effect of gender and race/ethnicity on perceived organizational support?

Mor Barak et al. (1998) studied race and gender differences in perceptions at work. Their study revealed a race and gender interaction in employee perceptions. White males were found to differ from women and minority men and women in perceptions of organizational fairness and inclusion. As such, it is expected that gender and race have an interaction effect on perceived organizational support.

Research question 2g: Is there an interaction effect of gender and organizational position on perceived organizational support?

Engineering is a traditionally male-dominated occupation, while clerical positions are traditionally held by females. Although this distribution may not be as distinct today,

it is hypothesized that organizational position moderates the relationship between gender and perceived organizational support.

Research question 3: Do groups differ in levels of affective commitment?

Research question 3a: Do gender groups differ in levels of affective commitment?

Given the inconsistent findings of past research, it is hypothesized that men and women do not differ in levels of affective commitment.

Research question 3b: Do age groups differ in levels of affective commitment?

Past research has found a generally positive relationship between age and affective commitment. As such, it is hypothesized that age groups differ in levels of affective commitment.

Research question 3c: Do tenure groups differ in levels of affective commitment?

Gregersen (1993) found different commitment patterns across three stages of tenure. This suggests that affective commitment differs across tenure groups. Most studies have found a positive relationship between tenure and affective commitment. One exception to this was a study conducted by Beck and Wilson (2000). They found that affective commitment decreased as tenure increased. Beck and Wilson (2000) studied police officers. Given the nature of the job, the generalizability of their findings may be limited. As such, it is hypothesized that tenure groups will differ in levels of affective commitment.

Research question 3d: Do ethnic groups differ in levels of affective commitment?

Previous research has not studied ethnic group differences in levels of affective commitment. As such, it is hypothesized that ethnic groups do not differ in levels of affective commitment.

Research question 3e: Do occupational groups differ in levels of affective commitment?

Although past research has not found occupational group differences, it is hypothesized that occupational groups differ in levels of affective commitment. Bruning and Snyder (1983) did not find organizational position differences in levels of commitment. Their research was conducted in federally funded social service organizations and therefore may not generalize to other industries.

Similarly, findings by Cohen and Hudecek (1993) suggest that occupational differences of affective commitment do not exist. Their study used broad categorizations of professional and non-professional, non-professional was sub-divided into manager, clerical, and other (unable to classify) groups. One potential problem with their classification is that the "other" group was larger than the manager group and the clerical group combined. In their discussion, however, they suggest that perhaps "an even more specific categorization of the white-collar subgroups is required. This may reveal significant differences in the correlations of the subgroups" (p. 207). Moreover, other areas of research have found occupational group differences. For example, Miles, et al. (1996) found supervisors and hourly workers differed in levels of job satisfaction.

Based on the findings of previous research, it is expected that occupational groups differ in levels of affective commitment.

Research question 3f: Is there an interaction effect of gender and occupational group on affective commitment?

In absence of prior studies examining this relationship, research on job satisfaction is considered. Mason (1994) found women and men in management positions did not differ in levels of satisfaction; however, in clerical positions, women reported a lower level of job satisfaction than their male counterparts. Based on this line of research, it is hypothesized that there is an interaction effect of gender and occupational group on level of affective commitment.

Research question 3g: Is there an interaction effect of gender and tenure on affective commitment?

Consistent with findings by Lynn, Cao, and Horn (1996), it is expected that gender moderates the relationship between tenure and affective commitment.

Relationships between Constructs

Research questions 4 through 6 address the relationships between the constructs affective commitment, perceived organizational support, supervisory communication, and intent to leave. These relationships are illustrated in Figure 1.

Figure 1

Relationships between constructs, research questions 4 through 6.
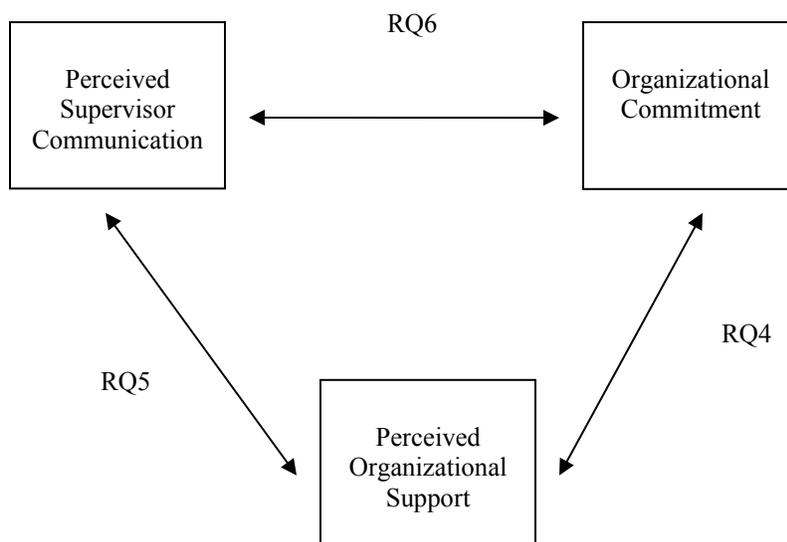
Research question 4: How is perceived organizational support related to affective

organizational commitment?

Consistent with previous research, it is hypothesized that as perceived

organizational support increases, affective organizational commitment will increase.

Research question 5: How is perceived organizational support related to supervisory

communication?

Previous research reports a positive relationship between perceived organizational

support and supervisory communication. As such, it is hypothesized that perceived

organizational support will increase as supervisory communication ratings increase.

Research question 6: Is supervisory communication related to affective commitment?

Supervisory communication is expected to positively relate to affective commitment. As supervisory communication ratings increase, employee affective commitment to the organization increases.

<div align="center">Relationships between the Constructs and Intention to Leave</div>

Research questions 7 and 8 attempt to determine the predictive relationship between the constructs and intention to leave. Research question 8 integrates employee characteristics and research constructs using discriminate analysis.

Research question 7: Are affective organizational commitment, perceived supervisor communication, and perceived organizational support predictive of intention to leave?

Consistent with past research, affective organizational commitment and perceived organizational support will each predict intention to leave. Previous research has not studied the relationship between perceived supervisor communication and intent to leave. As such, perceived supervisor communication is not expected to predict intent to leave.

Research question 8: Based on the constructs investigated, can employees who intend to stay be distinguished from those who intend to leave?

Various group variables have been found to moderate relationships between employee attitudes and outcomes. For example, research by Sweeney and McFarlin (1997) found that perceived organizational justice differentially predicted organizational commitment in men and women. Occupational group has also been found to moderate various relationships. Grunberg, Anderson-Connolly and Greenberg (2000) found organization position moderated the relationship between employee perceptions and commitment. Specifically, they found that organizational position moderated the

relationship between perceived organizational fairness and organizational commitment. Job position was also found to moderate the relationship between supervisory communication and job satisfaction. Findings by Miles, et al. (1996) suggest that occupational position moderates the relationship of supervisory communication and job satisfaction. As such, it is hypothesized that occupational group will moderate the research model.

Collectively, answers to these research questions will help to determine the relationship between employee demographics, attitudes and perceptions, and intention to leave.

METHOD

Participants

Participants are employees of a large engineering firm with offices throughout North America. This study will use data collected as part of the 2001 annual employee survey (N=2,838).

Data Collection

Participant responses were originally collected as part of the company's annual employee survey. These surveys are administered towards the end of the calendar year. Participation requests are sent to employees' company e-mail accounts. Each e-mail contains a message from the company president requesting participation in the survey and a link to the web-based survey. Follow up requests are sent to all employees a week after the original request. The data collection period is 2 weeks long. Survey participation is completely voluntary.

Employee response rate for the survey was 56.6%. The low response rate may be attributed to the voluntary nature of the survey. Additionally, depending on workload, employees may not have time to complete the survey. Given the consulting environment, where client-billable time is tracked, employees may be less motivated to perform "overhead" or administrative type activities, such as completing an organizational survey. Since results were not collected using any sampling methodology, there is no way to guarantee that the results are representative of the organization. The high number of respondents (N = 3,699) suggests that the sample is representative. Employees from

affiliate companies were not included in the analysis, resulting in a dataset of 2838 respondents.

Because survey results were eventually linked to employee numbers, the survey was not completely anonymous; however, results of the survey where analyzed and presented on the organizational, not individual, level. Individual employees were not directly linked to their responses. To the extent that individual responses were not published or discussed, the survey was confidential. Managers were not provided with subordinate survey responses. Further, managers were not aware which subordinates did or did not participate in the survey. Since employee responses were semi-anonymous and collected via the internet, it is assumed that employees were honest in their responses.

<div align="center">Operationalizations</div>

Perceived organizational support is operationalized as the composite score from nine survey questions. Questions were answered using a 4 point scale ranging from 1= never to 4= always. Specific questions are listed in Appendix A. When performing structural equation modeling, each question will be used as a manifest variable.

Supervisory communication is operationalized as the composite score from 5 survey questions. Specific questions are listed in Appendix A. For structural equation modeling, each survey item will be treated as a manifest variable.

Organizational commitment is operationalized as the composite score from four survey questions. Specific questions are provided in Appendix A. When using structural equation modeling, the four survey questions will be used as manifest variables.

Intent to leave is operationalized by yes or no response to the question "Are you considering leaving (company name) within the next year or so?" This response will be dummy coded as 0=yes and 1=no.

Occupation classification is categorized as practice management, consulting, technical, and office. Practice management positions include human resource, marketing, and upper-managerial staff (regional officers). Project managers will not be included in this category. Consulting positions primarily include engineering and planning staff. Technical positions include drafters, IT personnel, and surveyors. Office positions include administrative and project assistants, accountants, and facilities personnel. Occupation classifications will be coded as: Practice management=1, Consulting=2, Technical=3, Office=4

Both age and tenure will be analyzed as continuous variables. This information will be based on Human Resource information.

Ethnicity will be operationalized Caucasian, Black, Hispanic, Asian/Pacific Islander, and Native American. Employees' ethnicity will be determined by the codes determined by Human Resources. For analysis, ethnicity will be coded as follows: Caucasian=1, African-American=2, Hispanic=3, Asian-Pacific Islander=4, Native American=5.

Gender will be operationalized as male or female. For regression analysis, gender will be dummy coded as 0=male and 1=female.

Proposed Secondary Data Analysis

Confirmatory Factor Analysis. Prior to answering any research questions, confirmatory factor analysis will be conducted to verify the factor structure of the survey items. Items are predicted to cluster around 4 factors representing the perceived organizational support, supervisory communication, affective organizational commitment constructs, and intention to leave constructs. Analysis will be performed using the Proc CALIS operation in SAS.

Analysis of Variance. The significance of group differences in organizational commitment and perceived organizational support can be determined through one-way analyses of variance. Analyses will be conducted for each occupational group for perceived organizational support, affective commitment, supervisory communication, and intention to leave.

Correlation and Regression Analysis. The relationship between perceived organizational support, perceived supervisory communication, and organizational attachment can be studied by analyzing the regression model. Moreover, multiple logistic regression will be used to develop an equation to predict intent to leave.

Discriminant Analysis. Perceived organizational support, perceived supervisory communication, affective commitment, and demographic characteristics will be used to predict intent to leave using discriminant analysis. Specifically, Epanechnikov kernel density method of discriminant analysis will be used.

Analysis follows for each specific research question.

Research question 1: Do groups differ in ratings of perceived supervisory communication?

Research question 1a: Do gender groups differ in ratings of perceived supervisory communication?

Analysis of variance will be used to determine whether gender groups differ in ratings of perceived supervisory communication. Ratings of perceived supervisory communication will be compared between women and men to see if there is a statistically significant difference.

Research question 1b: Do age groups differ in ratings of perceived supervisory communication?

Analysis of variance will be used to determine whether age groups differ in ratings of perceived supervisory communication. Ratings of perceived supervisory communication for the four age groups will be compared.

Research question 1c: Do tenure groups differ in ratings of perceived supervisory communication?

Analysis of variance will be used to determine whether tenure groups differ in ratings of perceived supervisory communication.

Research question 1d: Do race/ethnic groups differ in ratings of perceived supervisory communication.

Analysis of variance will be used to determine whether gender groups differ in ratings of perceived supervisory communication. Difference in ratings by the three tenure groups will be tested for statistical significance.

Research question 1e: Do occupational groups differ in ratings of perceived supervisory communication?

Analysis of variance will be used to determine whether occupational groups differ in ratings of perceived supervisory communication. Ratings for each occupational group will be compared to see if there are statistically significant differences.

Research question 2: Are there any group differences in levels of perceived organizational support?

Research question 2a: Do gender groups differ in levels of perceived organizational support?

Analysis of variance will be used to determine whether gender groups differ in ratings of perceived supervisory communication.

Research question 2b: Do age groups differ in levels of perceived organizational support.

Analysis of variance will be used to determine whether age groups differ in ratings of perceived supervisory communication.

Research question 2c: Do tenure groups differ in levels of perceived organizational support?

Analysis of variance will be used to determine whether tenure groups differ in ratings of perceived supervisory communication.

Research question 2d: Do ethnic groups differ in levels of perceived organizational support?

Analysis of variance will be used to determine whether ethnic groups differ in ratings of perceived supervisory communication.

Research question 2e: Do occupational groups differ in levels of perceived organizational support?

Analysis of variance will be used to determine whether occupational groups differ in ratings of perceived supervisory communication.

Research question 2f: Is there an interaction effect of gender and race/ethnicity on perceived organizational support?

The predictive relationship between gender and perceived organizational support will be tested using a regression model. Race will be tested as a moderator. Gender and race are expected to relate negatively with perceived organizational support. Perceived organizational support is expected to be lowest in women and minority males and highest in white males.

y_1(perceived organizational support) = b_0 - $b_1 x_1$(gender) – $b_2 x_2$(race) – $b_3 x_1$(gender) *x_2(race)

Research question 2g: Is there an interaction effect of gender and organizational position on perceived organizational support?

Perceived organizational support will be predicted using a regression model. It is predicted that the relationship between perceived organizational support and gender will be negatively moderated by organizational position. The predicted relationship is expected to be stronger for lower organizational positions.

y_1(perceived organizational support) = b_0 - $b_1 x_1$(gender) - $b_2 x_2$(organizational position) – $b_3 x_1$(gender) *x_2(organizational position)

Research question 3: Do groups differ in levels of affective commitment?

Research question 3a: Do gender groups differ in levels of affective commitment?

Analysis of variance will be used to determine whether gender groups differ in ratings of perceived supervisory communication.

Research question 3b: Do age groups differ in levels of affective commitment?

Analysis of variance will be used to determine whether age groups differ in ratings of perceived supervisory communication.

Research question 3c: Do tenure groups differ in levels of affective commitment?

Analysis of variance will be used to determine whether tenure groups differ in ratings of perceived supervisory communication.

Research question 3d: Do ethnic groups differ in levels of affective commitment?

Analysis of variance will be used to determine whether ethnic groups differ in ratings of perceived supervisory communication.

Research question 3e: Do occupational groups differ in levels of affective commitment?

Analysis of variance will be used to determine whether occupational groups differ in ratings of perceived supervisory communication.

Research question 3f: Is there an interaction effect of gender and occupational position on affective commitment?

A regression model will be used to predict affective commitment using gender. The relationship between affective commitment and gender is expected to be negatively moderated by organizational position. The predicted relationship is expected to be stronger for lower organizational positions.

y₁(affective commitment) = b₀₋ - b₁x₁(gender) – b₂x₂(organizational position) -

b₃x₁(gender) *x₂(organizational position)

$y_1(\text{affective commitment}) = b_0 - b_1x_1(\text{gender}) - b_2x_2(\text{organizational position}) - b_3x_1(\text{gender}) * x_2(\text{organizational position})$

<u>Research question 3g</u>: Is there an interaction effect of gender and tenure on affective

commitment?

The relationship between tenure and affective commitment is expected to be

negatively moderated by gender. Affective commitment will be predicted using a

regression model. The predicted relationship is expected to be stronger for men.

$y_1(\text{affective commitment}) = b_0 - b_1x_1(\text{tenure}) - b_2x_2(\text{gender}) - b_3x_1(\text{tenure}) * x_2(\text{gender})$

Research question 4: How is perceived organizational support related to affective

organizational commitment?

Perceived organizational support is expected to positively predict affective

commitment. Regression modeling will be used to test this relationship.

$y_1(\text{affective commitment}) = b_0 + b_1x_1(\text{perceived organizational support})$

Research question 5: How is perceived organizational support related to supervisory

communication?

Using a regression model, the predictive positive relationship between perceived

supervisory communication and perceived organizational support will be tested.

$y_1(\text{perceived organizational support}) = b_0 + b_1x_1(\text{perceived supervisory communication})$

Research question 6: Is supervisory communication related to affective commitment?

Supervisory communication is expected to positively predict affective

commitment. This relationship will be tested using a regression model.

$y_1(\text{affective commitment}) = b_0 + b_1x_1(\text{perceived supervisory communication})$

Research question 7: Are affective organizational commitment, perceived supervisor communication, and perceived organizational support predictive of intention to leave?

Simple logistic regression analysis will be used to test the relationships between each construct and intention to leave.

Research question 8: Based on the constructs investigated, can employees who intend to stay be distinguished from those who intend to leave?

Multiple logistic regression analysis and Epanechnikov kernel density method of discriminant analysis will be used to categorize those employees who intend to leave from those who intend to stay.

RESULTS

Sample Statistics

Demographics of the sample and the entire company are presented in Table 1. The demographic composition of the company sample is similar to that of the entire company for all categories. Company-wide data was not available for the occupation categories. This information was collected as part of the survey. All other information came from Human Resource records.

Table 1

Sample and company characteristics

	Sample	Company
Gender		
Male	N=1704 (60%)	N=3447 (61%)
Female	N=1134 (40%)	N=2198 (39%)
Age	Mean = 41.07	Mean= 41.62
Tenure	Mean= 7.36	Mean= 7.86
Race		
Caucasian	N=2491 (87.8%)	N= 4808 (85.1%)
African-American	N=98 (3.5%)	N= 248 (4.4%)
Asian/Pacific Islander	N= 145 (5.1%)	N= 336 (5.9%)
American Indian	N= 12 (.4%)	N= 31 (.6%)
Hispanic	N= 92 (3.2%)	N= 228 (4.0%)
Occupation Category		
Office/Clerical	N= 362 (12.7%)	n/a
Technical	N= 425 (15.0%)	n/a
Consulting	N= 1479 (52.1%)	n/a
Practice Management	N= 377 (13.3%)	n/a
Unknown	N= 195 (16.9%)	n/a

n/a = not available

Confirmatory Factor Analysis

To assess the survey items selected for analysis, confirmatory factor analysis was performed on the data. Items were expected to represent three constructs: affective commitment, perceived organizational support, and perceived supervisory communication. As such, a three factor model was tested.

Near-zero standard errors on manifest variables may suggest an estimation problem (Hatcher, 1994). The standard errors were found to be low, but not near-zero.

Model fit was assessed using goodness of fit, chi-square, non-normed index, root mean square error of approximation (RMSEA), and comparative fit index index (CFI). The chi-square/degrees of freedom ratio did not meet the standard criteria (1.5 ratio). While this is a rough approximation of model fit, it is included here because it is a commonly used criterion. According to Hatcher (1994), a non-normed fit index and a comparative fit index with values over 0.90 indicate an acceptable model fit. According to these indices the full model provides an acceptable fit.

Based on the Gamma Lagrange Multipliers Modification Index, 3 items were dropped from the model. These three items were found to be cross-loaders. Dropping the items improved the model fit indices as shown in Table 2. Factor loadings are provided in Table 3. Obtained t-values indicate that all factor loadings are significant (p<.001). Descriptive statistics are provided in Table 4.

Table 2

Confirmatory Factor Analysis Model Fit Summary

Indices	Statistic
Goodness of Fit	0.9422
Chi-Square	1238.9345
Chi-Square DF	87
Non-normed Index	0.9318
CFI	0.9435
RMSEA	0.0683

Table 3

Confirmatory Factor Analysis of Survey Items

Statement	Factor 1	Factor 2	Factor 3
Are you treated fairly?	.69		
Are your talents recognized and appreciated by your superiors?	.65		
I feel that high performance is rewarded in this organization.	.61		
I think the firm gives sufficient consideration to the needs, desires, and demands of the personal lives of its employees.	.49		
I am confident of continued employment as long as I do a good job.			
(Company name) welcomes the unique value each individual brings to the workplace.	.71		
I feel welcome and accepted for who I am.	.75		
I feel safe to challenge, question, or offer my opinions.	.67		
I have opportunities to do meaningful work.	.63		
I feel good about the future of the company.		.63	
I am proud of the work I do.		.62	
I am proud to tell my family and friends that I work at (company name).		.78	
If I have a question regarding the firm's policies or procedures, I can readily get a clear and satisfactory answer from my supervisor or some other source within (company name).			
My supervisor genuinely listens to others.			.85
My supervisor shares appropriate information.			.86
My supervisor communicates ideas clearly and persuasively.			.89
My supervisor is approachable and available when needed.			.78

Table 4

Descriptive Statistics

Variable	N	M	SD	Coefficient Alpha
Perceived Supervisory Communication	2838	12.685	2.759	0.854
Perceived Organizational Support	2838	24.071	3.907	0.702
Affective Communication	2838	10.336	1.490	0.906

Table 5

Non-parametric Analysis of Variance Results: Gender differences in perceived

supervisory communication, perceived organizational support, and affective commitment

Variable	Z	Two-sided Pr> $\lvert Z \rvert$
Perceived Supervisory Communication	-0.1502	0.8806
Perceived Organizational Support	-1.6685	0.0952
Affective Commitment	0.5108	0.6053

Non-parametric analysis of variance was used instead of analysis of variance because data were not normally distributed. The results of non-parametric analysis of variance are presented in Table 5. These results suggest that mean supervisory communication ratings (RQ1a), perceived organizational support (RQ2a), and affective commitment (RA3a) do not significantly differ by gender. Males and females perceive supervisory communication similarly.

Table 6

Non-parametric Correlation Results: Relationship between age and perceived

supervisory communication, perceived organizational support, and affective commitment

	β	t	Pr > |t|	R	R^2	F	Dfs
Perceived Supervisory Communication	-0.00933	-1.83	0.0676	-0.03433	0.0012	3.34	1
Perceived Organizational Support	-0.01851	-2.56	0.0104	-0.04813	0.0023	6.58	1
Affective Communication	0.00676	2.46	0.0139	0.04618	0.0021	6.05	1

Non-parametric correlation analysis results are shown in Table 6. Age and perceived supervisory communication were found to negatively correlate. The correlation is low and not significant at the $p < 0.05$ level ($p = 0.0676$). Simple regression analysis did not significantly support a predictive relationship between age and ratings of supervisory communications.

Age and perceived organizational support were also found to negatively correlate ($r = -0.04813$, $p = 0.014$). Simple regression analysis indicates that age is predictive of perceived organizational support. This suggests that there is a weak but significant between age and perceived organizational support.

Age and affective commitment were found to positively correlate ($r = 0.04618$, $p = 0.0139$). Simple regression analysis suggests that age is predictive of affective commitment. These results indicate that the relationship between age and affective commitment is weak.

Table 7

Non-parametric Correlation Results: Relationship between tenure and perceived

supervisory communication, perceived organizational support, and affective commitment

	β	t	Pr > |t|	R	R^2	F	Dfs
Perceived Supervisory Communication	-0.01653	-2.44	0.0147	-0.04585	0.0021	5.96	1
Perceived Organizational Support	-0.03396	-3.55	0.0004	-0.06658	0.0044	12.61	1
Affective Communication	-0.00689	-1.89	0.0594	-0.03541	0.0013	3.56	1

Tenure was found to negatively correlate with perceived supervisory communication, perceived organizational support, and affective commitment. Simple linear regression reveals that tenure is a weak but statistically significant predictor of perceived supervisory communication (r = -0.04585, p = 0.0147) (RQ1c). Tenure and perceived organizational support were found to have a similar relationship (r = -0.06658, p = 0.0004) (RQ2c). Linear regression also found that tenure was weak predictor of affective commitment, but this relationship was not significant (t = -1.89, p = 0.0594) (RQ3c). These results are presented in Table 7.

Table 8

Non-parametric Analysis of Variance Results: Race group differences in perceived

supervisory communication, perceived organizational support, and affective commitment

	χ^2	df	p
Perceived Supervisory Communication	12.3454	4	0.0150
Perceived Organizational Support	1.5755	4	0.8132
Affective Commitment	11.9134	4	0.0180

The results of non-parametric analysis of variance are shown in Table 8. These results suggest that ethnic groups differ in ratings of perceived supervisory communication (RQ1d) and affective commitment (RQ3d) but not in ratings of perceived organizational support (RQ2d). Group differences in ratings of perceived organizational support were significant (p=0.0150). Similarly, group differences in ratings of affective commitment were statistically significant (p = 0.0180). These findings suggest that while racial groups differ in ratings of perceived supervisory communication and affective commitment, they did not significantly differ in ratings of perceived organizational support.

Table 9

Non-parametric Analysis of Variance Results: Occupational group differences in

perceived supervisory communication, perceived organizational support, and affective

commitment

	χ^2	df	p
Perceived Supervisory Communication	24.9518	3	<0.0001
Perceived Organizational Support	8.6442	3	0.0344
Affective Commitment	21.7284	3	<0.0001

Non-parametric analysis of variance indicates that occupational groups significantly

differ in ratings of perceived supervisory communication, perceived organizational

support, and affective commitment. Results are shown in Table 9. Consulting employees

reported the lowest ratings of perceived supervisory communication while Practice

Management employees reported the highest ratings (RQ1e). Differences between

occupational groups were significant at the p<0.0001 level. Practice Management

employees reported the highest ratings of perceived organizational support while Office

and Technical employees reported the lowest ratings (RQ2e). Group differences were

significant at the p=.05 level. Practice Management employees reported the highest levels

of commitment while Consulting employees reported the lowest levels (RQ3e). These

group differences were found to be significant at the p<0.0001 level.

Table 10

Factorial Logistic Regression Results: Interaction effects of gender and race on

perceived organizational support.

	DF	Chi-square	Pr> Chi-square
Model (likelihood ratio)	8	9.602	0.2940
Gender	1	.8298	0.3624
Race	4	3.1078	0.5400
Gender*Race	3	3.0560	0.3831

Ideally, the interaction effect of gender and race on perceived organizational

support would be analyzed using multiple regression; however, because the dataset was

not normally distributed, it would be inappropriate to use this method of analysis. To

allow for factorial logistic regression analysis, the perceived organizational support

variable had to be treated as a dichotomous variable. Responses in the first quartile

(lowest 25%) and the fourth quartile (highest 25%) were treated as dichotomous

dependent variables in this analysis. High perceived organizational support was coded as

1 and low perceived organizational support was coded as 0. This analysis tested the

effects of gender, race, and the gender and race interaction on perceived organizational

support. Results are summarized in Table 10. The model was not significant (likelihood

ratio X^2=9.602 , p=0.2940). Similarly, the effects of gender and race on perceived

organization support were not significant (p=0.3624 and p=0.5400 respectively).

Moreover, the results suggest that the interaction between gender and race on ratings of perceived organizational support (RQ2f) was not significant (p=0.3831).

Table 11

Factorial Logistic Regression Results: Interaction effects of gender and occupation category on perceived organizational support.

	DF	Chi-square	Pr> Chi-square
Model (likelihood ratio)	7	9.1903	0.2393
Gender	1	4.3630	0.0367
Occupation category	3	16.9868	0.0957
Gender*Occupation	3	0.8765	0.8311

Gender and occupation category do not have a significant interaction effect on levels of perceived organizational support (RQ2g). Results are presented in Table 11. The model tested was not found to be statistically significant (likelihood ratio X^2=9.1903, p=0.2393); however, gender was found to have a significant effect (p=0.0367). The interaction between gender and occupation was not found to be significant (p=0.8311).

Table 12

Factorial Logistic Regression Results: Interaction effects of gender and occupation

category on affective commitment.

	DF	Chi-square	Pr> Chi-square
Model (likelihood ratio)	7	18.3075	0.0107
Gender	1	2.3804	0.1229
Occupation	3	16.9868	0.0007
Gender*Occupation	3	1.6026	0.6588

Gender and occupation category do not have a significant interaction effect on affective commitment (RQ3f). Results of factorial analysis of variance are shown in Table 12. While the model was shown to be significant (likelihood ratio X^2= 18.3075, p = 0.0107), the only effect found to be significant was that of occupational group (p=0.0007). The interaction between gender and occupation category is not significant (p=0.6588).

Table 13

Factorial Logistic Regression Results: Interaction effect of gender and tenure on

affective commitment.

	DF	Chi-square	Pr> Chi-square
Model (likelihood ratio)	3	4.7782	0.1888
Gender	1	0.0140	0.9058
Tenure	1	3.7108	0.0541
Gender*Tenure	1	0.0054	0.9417

Factorial logistic regression was used to test the interaction effect of gender and

tenure on affective commitment (RQ3g). Results of this analysis are presented in Table

13. The model not statistically significant (likelihood ratio X^2=4.7782, p= 0.1888).

Neither gender nor tenure were found to have a significant effect on affective

commitment (p=0.9058 and p=0.0541, respectively). The interaction effect of gender and

tenure was not found to be significant (p = 0.9417).

Table 14

Non-parametric Correlation Results: Perceived organizational support, and affective

commitment, and perceived supervisory communication.

	POS	AC	SC
Perceived Organizational Support	1.00000	0.61889 <.0001	0.60300 <.0001
Affective Commitment	0.61889 <.0001	1.00000	0.40024 <.0001
Perceived Supervisory Communication	0.60300 <.0001	0.40024 <.0001	1.00000

Non-parametric correlation analysis was used to study the relationship between perceived organizational support and affective commitment (RQ4). Perceived organizational support and affective commitment were found to have a correlation of 0.6189. This positive correlation is in the direction expected. The relationship between perceived organizational support and perceived supervisory communication was also studied using non-parametric correlation analysis (RQ5). The two constructs were found to be positively correlated (r=0.6030). Similarly, analysis supported a positive relationship between affective commitment and perceptions of supervisor communication (RQ6). Affective commitment and perceived supervisory communication were found to have a 0.40024 correlation.

Table 15

Simple Logistic Regression Results: Relationship of perceived supervisory communication, perceived organizational support, and affective commitment with intention to leave

	Wald Chi-square	Pr> Chi-square
Perceived Supervisory Communication	179.994	<0.0001
Perceived Organizational Support	315.649	<0.0001
Affective Commitment	293.144	<0.0001

The results of simple logistic regression indicate that perceived supervisory communication, perceived organizational support, and affective commitment are all

significant predictors of intent to leave (RQ7). Results are presented in Table 15. All

constructs were significant at the p < 0.0001 level.

Table 16

Multiple Logistic Regression Results: Relationship between perceived supervisory

communication, perceived organizational support, affective commitment, and intent to

leave.

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	7.6997	0.5387	204.2915	<.0001
POS	1	-0.2558	0.0975	6.8756	0.0087
AC	1	-0.2068	0.0220	88.1011	<.0001
SC	1	-0.3067	0.0460	44.5328	<.0001
age	1	-0.0193	0.00932	4.2715	0.0388
tenure	1	-0.0182	0.00627	8.4555	0.0036

The results of multiple logistic regression show that perceived organizational

support, affective communication, supervisory communication, age, and tenure are

significant predictors of intention to leave (RQ8). Results are presented in Table 16.

Table 17

Epanechnikov Kernel Density Method of Discriminant Analysis Results: Discriminating

between employees intending to leave and employees intending to stay (r=0.5).

Number of Observations and Percent Classified into Intention to Leave				
	Leave	Stay	Other	Total
Calibration group				
Leave	94	6		100
	94.00	6.00		100.00
Stay	0	560		560
	0.00	100.00		100.00
Total	94	566		660
	14.24	85.76		100.00
Error count estimate	0.0600	0.0000		0.0091
Test group				
Leave	8	25	62	95
	8.42	26.32	65.26	100.00
Stay	12	246	307	565
	2.12	43.54	54.34	100.00
Total	20	271	369	660
	3.03	41.06	55.91	100.00
Error count estimate	0.9158	0.5646		0.6178
Priors	0.15152	0.84848		

Logistic regression was used for the purpose of predicting intention to leave. The

effects of perceived supervisory communication, perceived organizational support,

affective commitment, age, gender, tenure, and occupational category were analyzed.

Backward, stepwise, and forward selection were used, with the significance level set at

0.05. Backward elimination removed tenure and gender. Stepwise and forward selection

identified ratings of perceived supervisory communication, perceived organizational

support, and affective commitment, along with age, and occupation category as significant.

The variables identified by stepwise and forward selection were used in the Epanechnikov kernel density method of discriminant analysis. The sample was divided into four groups. Group 1 was used for calibration (r= 0.5) and group 3 was used as the test population. The error rate for the calibration group was low (0.9% misclassified). The error rate for the test group was high (61.8% misclassified) (RQ8). Results are shown in Table 17.

This was repeated with group 2 used for calibration (r = 2.0) and group 4 used as a test population. Increasing the radius resulted in a higher error rate in the calibration group (10.6% misclassified) and a lower error rate in the test group (11.7% misclassified). These results are presented in Table 18.

Table 18

Epanechnikov Kernel Density Method of Discriminant Analysis Results: Discriminating

between employees intending to leave and employees intending to stay (r = 2.0).

Number of Observations and Percent Classified into Intention to Leave				
	Leave	Stay	Other	Total
Calibration group				
Leave	17	69		86
	19.77	80.23		100.00
Stay	1	573		574
	0.17	99.83		100.00
Total	18	642		660
	2.73	97.27		100.00
Error count estimate	0.8023	0.0017		0.1061
Test group				
Leave	16	84	0	100
	16.00	84.00	0.00	100.00
Stay	4	554	1	559
	0.72	99.11	0.18	100.00
Total	20	638	1	659
	3.03	96.81	0.15	100.00
Error count estimate	0.8400	0.0089		0.1172
Priors	0.1303	0.8697		

DISCUSSION

Meaningful differences where not found in the groups studied. The differences found are more likely a result of the large sample size than of actual differences that would have organizational implications, as such caution should be exercised when interpreting these findings.

When the changing demographics of the workforce are discussed, the increase of women and the increase of minorities are often mentioned as significant changes. Results of this study suggest that men and women do not significantly differ in ratings of supervisory communication, perceived organizational support, or levels of affective commitment. Whether the increase of women in the workforce will create a gender difference in employee attitudes remains to be seen. These results suggest that currently, any differences in perceptions of support or supervisor communication are not significant. Moreover, women expressed the same levels of affective commitment as men. The large sample size and the fact that no statistically significant differences emerged provide important support for the argument that gender differences in employee perceptions and attitudes do not exist.

Ethnic groups did not meaningfully differ in ratings of supervisor communication. Perhaps supervisors utilize communication styles which meet the communication needs of the different ethnic groups. Alternately, perhaps all employees, regardless of ethnicity, have similar communication needs. That racial groups do not significantly differ in ratings of organizational support suggests that the company has policies and practices that are consistently applied across racial groups. This can be interpreted in two ways. First, it

could imply that all racial groups have identical support needs. Second, if ethnic groups require different types of organizational support, it could imply that current company practices meet employees' needs regardless of race. Racial groups were not found to meaningfully differ in levels of affective commitment. Collectively, these findings do not support the claim that changing racial demographics of the workforce is an issue that has organizational implications.

Occupational groups do not substantially differ in ratings of perceived supervisory communication, ratings of organizational support, and levels of affective commitment; however, analysis did reveal an interesting response pattern. For each construct, Practice Management employees as a group responded the most positively. Although Office and Technical employees reported the lowest ratings of perceived organizational support, as a group they expressed higher levels of affective commitment than the Consulting employees. This suggests that occupation group may moderate the relationship between affective commitment and perceived organizational support. As such the relationship between affective commitment and perceived organizational support may be different for each occupational group. Analysis of the entire sample resulted in a positive correlation between affective commitment and perceived organizational support. This correlation may not accurately represent the relationship between the constructs for employees within each occupational group.

The correlation between age and ratings of supervisory communication was found to be negative. This suggests that older workers perceive supervisory communication less

positively than younger workers; however, interpretation of the relationship is limited due to the weak relationship.

Similarly, age was found to negatively correlate with ratings of organizational support. This finding suggests that older workers perceive lower levels of organizational support than younger workers. Again, the weak correlation limits further interpretation of this relationship.

A weak correlation was found between age and affective commitment, meaning that older workers tend to report higher levels of affective commitment. It is important to note that this finding was not meaningfully significant. Although the correlations are weak , it is interesting to note that organizational support positively correlates with affective commitment. It would be expected that if older workers express higher levels of affective commitment, they would also perceive higher levels of organizational support. Future research may examine age as a moderator of the relationship between the two constructs. The relationship between affective commitment and perceived organizational support may vary depending on the employee's age.

An aging workforce is also part of the demographic changes expected in the future, these findings do not provide conclusive support for difference in employee attitudes or perceptions due to age.

Tenure weakly and negatively correlates with ratings of supervisory communication. This finding indicates that the longer an employee is with the company, the lower their ratings of supervisor communication; however the differences between long-tenured and new employees were not substantially significant. Similarly, tenure was

shown to negatively correlate with perceived organizational support. Whether or not longer-tenured employees are actually given less support from the organization than newer employees is not clear. Perhaps longer-tenured employees simply perceive lower levels of support. Another explanation may be that employees that have been with the company for a longer period of time have different standards for comparison. Once again these differences were not meaningfully significant. Further research may help to clarify this relationship by further studying generational differences in employee needs.

Unlike age, tenure was found to negatively correlate with levels of affective commitment. Like age, this relationship was found to be weak and not meaningfully significant. Whereas older workers express higher levels of affective commitment, longer tenured workers do not. This finding cautiously suggests an interaction between age and tenure. The relationship between age and affective commitment may vary according to tenure. For example, older workers who are new to the company may report different levels of commitment than older workers who have longer tenures. Future research may examine this relationship further.

Simple logistic regression results indicate that perceived organizational support, perceived supervisory communication, and affective commitment are individually significant predictors of intent to leave. Multiple linear regression using additional demographic variables were also significant predictors of intent to leave. Discriminant analysis using the Epanechnikov kernel density method could not consistently identify employees intending to leave and those intending to stay using only perceived organizational support, perceived supervisory communication, and affective

commitment. Perhaps the measure would have been predictive if employees were asked whether they were looking for alternative employment opportunities rather than their intention to leave.

Collectively these results show that group differences that may exist in the organization are not meaningful. While it may be helpful to include employee characteristics as variables when investigating the relationships between perceived supervisory communication, perceived organizational commitment, affective commitment, and intent to leave, these findings do not support the claim that organizational practices should take into consideration the changing demographic of the workforce.

Demographic groups display differences in ratings of supervisory communication and organizational support as well as levels of affective commitment; however these differences were not considerable. Perhaps difference will become more pronounced and significant as the workforce continues to diversify. If this is the case, then it will be important to identify these differences. Moreover, it will be important to determine if these differences are due to employee perceptions or actual differences in organizational practices. Regardless, these differences should still be considered by organizations when developing organizational policies and practices.

This study has several limitations that should be addressed. First, this study relied on archival data collected as part of a company survey. Measures of constructs were limited to items included on the survey. Although confirmatory factor analysis supported the 3 construct model, each construct could have been better measured using empirically

researched items (e.g. Meyer and Allen's Affective Commitment Scale; Eisenberger, et, al's Survey of Perceived Organizational Support). Second, intention to leave was measured by a single self-report yes/no item. While this allowed for the use of the Epanechnikov kernel density method of discriminant analysis, it significantly reduces the amount of variability in the responses. Additionally, the dataset analyzed did not include information on the status of employees after a year. It would have been interesting to see if those who expressed intentions to leave actually left. Third, as mentioned throughout the discussion, the nature of this study does not allow for the distinction in differences due to practice and differences due to perceptions to be made. Finally, because all data was collected within a single organization, caution must be exercised when generalizing these findings to other organizations.

Future research could analyze the attitudes and perceptions of different organizational groups. Rather than looking at employee demographic groups, perhaps groups defined by location (office or region) or business unit would provide more meaningful results.

This research contributes to understanding the implications a diversifying workforce may have on employee attitudes, perceptions, and intention to leave the organization. It demonstrates the gender differences are diminishing in the current workforce. Further, it suggests that meaningful group differences are not prevalent in the sample analyzed.

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APPENDIX A

Summary of research questions

		Research Question
RQ 1		Do _____ groups differ in ratings of perceived supervisory communication?
	RQ1a	gender
	RQ1b	age
	RQ1c	tenure
	RQ1d	ethnic
	RQ1e	occupation
RQ 2		Do _____ groups differ in levels of perceived organizational support?
	RQ2a	gender
	RQ2b	age
	RQ2c	tenure
	RQ2d	ethnic
	RQ2e	occupation
	RQ2f	Is there an interaction effect of gender and race ethnicity on perceived organizational support?
	RQ2g	Is there an interaction effect of gender and organization position on perceived organizational support?
RQ 3		Do _____ groups differ in levels of affective commitment?
	RQ3a	gender
	RQ3b	age
	RQ3c	tenure
	RQ3d	ethnic
	RQ3e	occupation
	RQ3f	Is there an interaction effect of gender and occupational group on affective commitment?
	RQ3g	Is there an interaction effect of gender and tenure on affective commitment?
RQ 4		How is perceived organizational support related to affective organizational commitment?
RQ 5		How is perceived organizational support related to supervisory communication?
RQ 6		Is supervisory communication related to affective commitment?

	Research Question
RQ 7	Are affective organizational commitment, supervisory communication, and perceived organizational support predictive of intention to leave?
RQ 8	Are group variables antecedents or mediators to the research model?

APPENDIX B

Constructs and survey questions

Construct	Question
Perceived Organizational Support	Are you treated fairly?
	Are your talents recognized and appreciated by your superiors?
	I think the firm gives sufficient consideration to the needs, desires, and demands of the personal lives of its employees.
	I feel that high performance is rewarded in this organization
	I am confident of continued employment as long as I do a good job. (dropped)
	(Company name) welcomes the unique value each individual brings to the workplace.
	I feel welcome and accepted for who I am.
	I feel safe to challenge, question, or offer my opinions.
	I have opportunities to do meaningful work.
Affective Organizational Attachment	I feel good about the future of the company.
	I am proud of the work I do.
	I am proud to tell my family and friends that I work at (company name).
Intent to Leave	Are you considering leaving (company name) within the next year or so?
Perceived Supervisor Communication	If I have a question regarding the firm's policies or procedures, I can readily get a clear and satisfactory answer from my supervisor or some other source within (company name). (dropped)
	My supervisor genuinely listens to others.
	My supervisor shares appropriate information.
	My supervisor communicates ideas clearly and persuasively.
	My supervisor is approachable and available when needed.