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Commuting in relation to work-life and home-life satisfaction

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COMMUTING IN RELATION TO WORK-LIFE AND HOME-LIFE SATISFACTION

A Thesis

Presented to

The Faculty of the Department of Psychology

San Jose State University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science

by

Jennifer L. Campbell

December 2007

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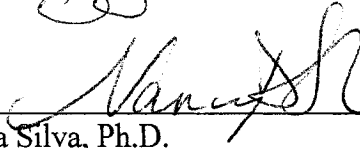
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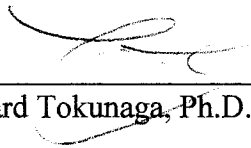
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ABSTRACT

COMMUTING IN RELATION TO WORK-LIFE AND HOME-LIFE SATISFACTION

By Jennifer L. Campbell

This study set out to address the relationship between mode of transportation, commute time, and commute length with work-life satisfaction and home-life satisfaction. Commuters' sex and perceived control over commute factors were expected to moderate the above relationships. Self-report survey data were completed voluntarily by working individuals living in the Northern California Bay Area and Central Texas. Study results show no differences between men and women on reports of work-life satisfaction or home-life satisfaction. Results do show, however, that as commute time and distance increase, work-life satisfaction and home-life satisfaction decrease for both men and women. Perceived control over traffic and sex do not moderate the relationship between both commute time and commute distance with work-life satisfaction or home-life satisfaction. Implications of commute time and distance on work-life and home-life satisfaction are discussed.

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INTRODUCTION

Numerous books, including *The Seven-Day Weekend: Changing the Way Work Works* (Semler, 2004) and *The One Minute Manager Balances Work and Life* (Blanchard & Blanchard, 1986) have been written to help individuals learn how to balance their work-life with their home-life. Classes are offered on improving one's personal time management. Time management seems to be a constant battle for employees and for employers who desire to achieve the perfect balance between work-life and home-life. In general, most people want to feel they are engaging in valuable and meaningful work (Gupta & Jenkins, 1999). However, they also want to have rich and fulfilling lives outside of work that may include having families and being involved in other activities. A problem occurs when the demands of either work-life or home-life overshadow the other and leave a feeling of imbalance between the two life areas.

Studies (e.g., Bunker, Zubek, Vanderslice & Rice, 1992; Tausig & Fenwick, 2001) have looked at possible causes of this imbalance. Some of these causes might include home-life issues of children, chauffeuring responsibilities, household cleaning duties, and cooking (Anderson & Spruill, 1993). Work-life demands might include workload, work deadlines, and general job dissatisfaction (Bunker et al.). One work-life demand and contributor toward dissatisfaction with work-life and home-life that has rarely been addressed is commuting (exceptions include Koslowsky, 1997; Novaco, Kliewer, & Broquet, 1991).

Until recently, commuting was not even considered a stressor of work and home-life. This might be because it is only more recently that people are frequently on the

road, tracks, or skies (United States Department of Transportation, 2004). Moreover, in most families the man of the house was the breadwinner and the woman the homemaker (Gupta & Jenkins, 1999). About the early 1980s, however, a shift occurred and more women entered the workforce (Johnston & Packer, 1987). In seeing this trend, Johnston and Packer asserted that by the year 2000 not only would women comprise two-thirds of new entrants into the workforce, but also “61% of all working age women would be expected to have jobs” (p. 20). Today, few U.S. families consist of a father who is the breadwinner and a mother who stays at home to care for the house and the children. As a logical consequence, both men and women are now combating traffic or commute congestion. Such a stressor could lead to conflict and strain in one’s home-life. In fact, the demands of balancing work-life and home-life responsibilities have been found to be a source of strain for both men and women (Anderson & Spruill, 1993; Thomas & Ganster, 1995; Westman & Etzion, 1995). With both parents now joining the workforce, spouses, parents, and single parents have to find ways to balance their time between both home-life and work-life. For people who have long commutes, balancing work-life and home-life becomes more challenging, as made evident by studies on commute factors in relation to work satisfaction and home satisfaction (e.g., Novaco et al., 1991).

Kirschner and Walum (1978) found that people who were commuting long distances, reported lower overall “global” life satisfaction. A long commute to and from work affects people’s blood pressure, moods, frustration tolerance, illness occasions, work absences, job stability, and overall life satisfaction, as well as work-family conflict (Novaco et al., 1991). According to Gupta and Jenkins (1999) commute to and from

work is often seen as an addition to the workday, extending the workday by the commute time to and from work. Therefore, commuting can become one more added demand of work-life. Long commute time also means less time with family or less time available for activities outside of work-life. In addition, the extent to which one has control over commute transportation and traffic could impact work-life and home-life satisfaction (Novaco, Stokols, & Milanesi, 1990).

The purpose of this study is to examine commute related variables in relation to self-reported work-life satisfaction and home-life satisfaction. In particular, results from this study are expected to show that an individual's self-reported work-life and home-life satisfaction are impacted by sex, commute length, commuting options, and commute control.

In the following section, literature on commute-related variables, including length (i.e., time and distance) and control over commute, work-life satisfaction, home-life satisfaction, and sex are reviewed and theoretical background for the study is provided.

LITERATURE REVIEW

Commuting and Commute-Related Variables

Effects of commuting on employees' work and home-life have been an increasing concern for U.S. employers (Johnston & Packer, 1987). According to Abdel-Salam, Eyres, and Cleary (1991) and Novaco et al. (1991), stimuli associated with commuting increase anxiety, lower productivity, increase absenteeism, and increase the likelihood for certain physical ailments and diseases. Unfortunately, the commuting situation is only getting worse. A report of the U.S. General Accounting Office (1989, cited in Novaco et al., 1991) stated that "the metropolitan-wide problem of traffic congestion has become more severe, showing major increases in average daily traffic volume for the United States' urban Interstate roads from 1980 to 1987" (p. 882). Each year thereafter, it has only worsened (U.S. Department of Transportation, 2004). The 2004 U.S. Department of Transportation Statistics study found that "commuting trips made to and from work accounted for 15 percent of all personal trips in 2001 [with] the average length of these trips [being] 12 miles" (p. 9). The study further showed that in 2001 general travel in the United States totaled an estimated 4.8 trillion miles or about 17,000 miles for each individual. This is an increase of 24% from 1991 to 2001. Over 85% of this travel was in personal vehicles, such as passenger cars or light trucks. During this same time period, controlling for length of commute, the growing number of personal vehicles on the road during peak commute times resulted in individual commutes taking an average of 39% longer than they did in 1991 (U.S. Department of Transportation, 2004).

The initial answer to the increasing commute times and highway congestion may appear simple – choose different modes of transportation to reduce highway congestion and ultimately commute time. However, a number of factors affect the mode of transportation one uses and choices might not be readily available. Such factors include proximity to transportation options, income, sex, and age (U.S. Department of Transportation, 2004).

Increases in congestion and traffic have inevitably negatively affected commuters. In particular, impedance due to traffic congestion has made it challenging to balance demands of work-life and family or home-life. Traffic is “a behavioral constraint on movement and goal attainment, thus, constituting an aversive, frustrating condition” (Novaco et al., 1991, p. 882). Although it is important to take into account that there are different variations on commuting (e.g., mode of transportation, time of day), for the purposes of this study commuting will be broadly defined as the time it takes to go from home to work [or from work to home] or the distance traversed during this trip (Koslowsky, 1997).

Because commuting can affect work behaviors, affects, and cognitions, it is seen here as a work-related stressor (Novaco et al., 1990, p. 231). In particular, this stressor stems from “commute impedance” (Novaco, Stokols, Campbell, & Stokols, 1979, p. 882), that is, any behavioral factor that restricts movement or an individuals’ goal attainment. This includes any event that impedes the goal of arriving at a particular destination, such as distance, slow speed, or traffic congestion (Novaco et al., 1991). Commute stressors (i.e., commute demands) examined in this study are commute time,

distance, and traffic control. Commute strains examined in this study are low work-life satisfaction and low home-life satisfaction.

Work-Life Satisfaction and Home-Life Satisfaction

Working adults can divide their lives into two domains: work-life and home-life. For many, these two life areas can conflict with one another and it becomes desirable to create a balance between them. Commute is one factor that potentially separates the two domains. The commute could be a short step to one's home office or a long commute walking, or via car, train, or plane. Whatever method a person chooses to get to and from work, studies have shown that a person's commute can have an impact on one's overall work satisfaction and home-life satisfaction (Bunker et al., 1992).

Employers recognize that employees who commute long distances may have greater strains created by the different factors inherent in a person's commute, such as distance, mode of transportation, interaction with other commuters, number of stops or drop offs made along the way, unusual traffic congestion, car trouble, commuter train delays (Novaco et al., 1991). To alleviate some of these additional stressors, companies often offer benefits to their employees, such as flexible work schedules or the option to telecommute (Tausig & Fenwick, 2001). The goal of such programs is to alleviate some of an employee's daily commute stressors, and possibly improve work and home-life balance. Unfortunately, some telecommuting employees end up working longer hours because their work is readily accessible at home (Patel, 2002; Semler, 2004).

Nonetheless, Thomas and Ganster (1995) conclude that employees who are given the opportunity to modify their schedules have feelings of overall control over work and

home-life, which further results in more positive reports of balance, and less work-family conflict, job dissatisfaction, depression, somatic complaints, and cholesterol. This finding suggests that scheduling flexibility allows one to be flexible with commute time and options. Scheduling is an important factor, but it is not studied here.

Commute Impedance Model: A Theoretical Foundation

A number of models and theories have been developed to explain the effects of commuting on an individual's feelings of work-life and home-life satisfaction (Staines & Pleck, 1986; Thomas & Ganster, 1995), the transfer of stress from work to home (Westman, 2001), and the transfer of stress from one partner to another (Bolger, DeLongis, Kessler, & Wethington, 1989; Westman & Etzion, 1995). Initial research on commuting began with Stokols, Novaco, Stokols, and Campbell (1978) and their *commute impedance model*. This model was further developed and refined the following year by Novaco et al. (1979). The model centers around two main points. First, commuting is a stressor, which is based on amount of commute impedance. Commute impedance is defined as any variable that impedes the goal of arriving at a destination, such as distance, slow speed, and traffic congestion. Commute impedance is thought to cause psychological strain, and can lead to health problems, general performance problems, and overall negative attitudes towards the experience of commuting.

It was initially thought that the speed of an individual's commute was an important impedance factor. Schaeffer, Street, Singer, and Baum (1988) found that speed was one of a number of predictors of the commuting experience. Their study also showed that control over a driver's internal environment (inside the car) and availability

of route choices also affected commute experience. Novaco et al. (1990) contended that one cannot look at average speed alone because a person driving 35 miles per hour might be taking side streets and driving at a normal speed whereas a person driving 55 miles per hour may be on a highway where the average speed is 75 miles per hour. Consequently, the person on the highway cannot go as fast as permitted. This analysis showed that “speed” alone is not an impedance factor and that other predictors need to be identified.

A second aspect of the *commute impedance model* is that negative effects of commute impedance on strain are eased by perceived control. The *commute impedance model* is similar to the model of job demands and control proposed by Karasek and Theorell (1990). Their model argues that there has to be a combination of high demands or stressors with low levels of control in order to induce strains.

Kluger (1998) set out to test the commute impedance model, operationalizing commute control as both choice and as variability. Choice refers to objective commute characteristics, such as number of alternative commute routes. Variability refers to consistency of commute route, time, and days. It reflects the predictability of one’s commute. This also involves commute length, which is distance and duration.

Kluger (1998) focused specifically on car commuting and not commutes by train or other form of mass transit. He found that commute characteristics, that is, duration, distance, speed, and congestion cause strain, including cognitive and affective commute strain, commute enjoyment, somatic and affective symptoms, and tardiness. Length of commute positively correlated with somatic and affective complaints and tardiness, but it did not correlate with enjoyment. Choice correlated positively with enjoyment and

negatively with somatic and affective symptoms, but it did not correlate with tardiness. Variability correlated positively with cognitive and affective strain, somatic and affective symptoms, tardiness, and negatively with enjoyment. However, feeling a sense of control over anything that impedes a commute did not alone reduce commute strain (i.e., resentment of commute, affect on productivity, fear for personal safety, worry, accidents, body aches, hostility, mental health, and traffic violations). Kluger then proposed that choice and variability mediate the relationship between length (in terms of distance, average time to work, and average time from work) and strain. Indeed, Kluger found that the relationship between commute length and strain is fully mediated by variability.

Commute Control as a Moderator of Commute Stressors and Satisfaction Relationships

Numerous researchers (e.g., Tausig & Fenwick, 2001; Thomas & Ganster, 1995) have attempted to operationalize control as a moderator of commuting. Control is a general belief that one has discretion to influence his or her environment (Karasek, 1979) such “that the environment becomes more rewarding or less threatening” (Thomas & Ganster, 1995, p. 7). Using this broad definition, it seems logical that control will have a positive impact on a person’s commuting experience. Landy (1992) asserted that the availability of choices (e.g., alternative routes) as part of a person’s commute can give that person a sense of control, even if he or she does not use any of the alternative commute choices available to him or her. People may gain a feeling of control by making changes in their regular route when they encounter congested streets or highways. If a person feels that there is a possibility of control over his or her commute, that perception alone may be sufficient to lower strains and possibly increase work-life

satisfaction and home-life satisfaction. However, these studies continue to have inconsistent results. Schaeffer et al. (1988) found that commute control positively related with blood pressure and negatively related with cognitive performance. Kasl (1989) found that control does not necessarily reduce strain, but its absence increases job strains.

Perceived or actual control can also impact a person's perception of control over the length of their overall commute time. Landy, Rastegary, Thayer, and Colvin (1991) found commute time to be important and noted that some people are "more concerned about time and its passage than others, and as a result, may be more prone to suffer physical and psychological symptoms...when demands are high" (p. 644). Koslowsky (1997) later points out that traffic congestion does not have an influence on distance, but it has an impact on commute time, if the commuter remains on the same route. The perception of having control over commute time, therefore, might reduce strains resulting from commute stressors.

Sex as a Moderator of Commute Stressors and Satisfaction Relationships

Previous research has indicated that sex is a moderator of the stressor-strain relationship stemming from a person's commute (Frankenhaeuser, 1986; Frankenhaeuser et al., 1989; Jones & Fletcher, 1993; Novaco et al., 1990). In particular, sex moderated the relationship between job stress and home-life satisfaction. The continuously growing number of women in the workforce means increased dual-income families and families where both partners are more likely to be commuting to work each day. Women, however, would likely have greater difficulty "unwinding" at the end of the workday due to the demands of their home duties and the simultaneous demands from their job

(Frankenhaeuser; Frankenhaeuser et al.). Because both partners may be working, there are now added concerns with regards to increased stress levels of each partner, as each tries to meet the demands of his or her work-life and share the demands and responsibilities of home-life. Dual income partners may no longer have the luxury of having one partner stay at home to cover household duties, and possibly, childcare responsibilities.

Further, research shows that commuting stress negatively affects home-life, particularly for women (Novaco et al., 1990). Although both men and women report greater work interference with home-life than home interference with work-life (Gutek, Searle, & Klepa, 1991), women report more work interference with family than do men, even when women spend the same number of hours at work as men. Also, when women spend more hours with family than do men, they do not report more family interference with work than do men. Part of this may be explained in findings by Anderson and Spruill (1993) that dual-commuter couples do not necessarily lead less traditional lifestyles in their division of household labor. That is, couples may still be performing stereotypical sex specific household roles. One reason cited was that “whether married or unmarried, mothers are much more likely to have child-chauffeuring duties than are fathers, and mothers must therefore link trips as part of work commutes or have other post commute travel demands” (Novaco et al., 1991, p. 885).

A caveat to the findings of Novaco et al. (1991) is that long distance commuting can be an equalizing force in the domestic division of labor (Gerstel & Gross, 1982). They further contend that sex of the commuter is a relevant component for understanding

commute stress. In a dual commuting relationship, both partners gained better competence in tasks that had been historically sex-based. According to Bird, Bird, and Scruggs (1984), as wife's incomes increase, husband's involvement in historically female tasks (e.g., cooking, cleaning, laundry, child care) also increase. They concluded that for women, it was "income and job status more than sex-role orientation that influenced task sharing" (p. 353). Employed wives expected more sharing of family tasks than their husbands did.

Summary of Study

In this study, commute stressors (average commute distance and average commute time) will be correlated with work-life satisfaction and home-life satisfaction. Perceived control over commute transportation options, control over traffic (i.e., speed and route), and sex will also be examined as correlates and as moderators or stressor-satisfaction relationships.

Hypotheses

The following hypotheses are proposed.

- H₁: People commuting to and from work using mass transit systems will report greater work-life satisfaction and home-life satisfaction than people who drive the same distance to and from work.
- H₂: Women will report lower levels of home-life satisfaction and work-life satisfaction than men.
- H₃: Commute length (i.e., each of time and distance) will correlate negatively with home-life satisfaction.

H₄: The relationship between commute length (i.e., each of commute time and commute distance) with both work-life satisfaction and home-life satisfaction will be moderated by commute control and by sex, such that:

- a) as commute length increases, work-life and home-life satisfaction will decrease more strongly for those with less control over traffic than for those with more control over commute traffic;
- b) as commute length increases, women will report less home-life satisfaction than men; and
- c) as commute length increases, men will report less work-life satisfaction than women.

METHOD

Participants

Approximately 200 surveys were distributed to people in Texas and Northern California, though the exact number is uncertain due to the distribution procedure described below. Under one-half (80 of 200) of the purported survey recipients completed and returned the surveys, yielding a 40% response rate. Of the returned surveys, 47.5% came from respondents in Texas and 52.5% came from respondents in Northern California. Respondents ranged in age from 22 to 68 years with an average of 43 years ($SD = 11.8$). There were more female respondents (61%) to this survey than male respondents (39%). About a third (31.2%) of the respondents (i.e., 25) have one or more children. A majority of the respondents were White/Euro-American (80%) and 80.1% have at least a Bachelors degree. Most (73.8%) respondents were either married or living with a partner and 60% of respondents' partners work outside the home and commute. Table 1 depicts the percent of respondents within each demographic category.

Industries represented by the sample include Education (16.3%), Finance and Legal (10%), Biotechnology/Pharmaceutical (10%), and Real Estate/Property Management (8.8%). A majority of the respondents work full-time (96.3%). The average tenure represented in respondents' current job is 6.7 years ($SD = 7.9$) with the modal commute distance being 11 – 25 miles (46%). The modal commute time is 11 – 30 minutes (46.6%), and 42.6% of the respondents have a commute time of 31 minutes or more. Respondents who begin their morning commutes before 8:00am comprise 68.8% of the sample. Participants generally leave their work to return home between 5:00pm

and 6:00pm (43.8%) with only 14 of the participants indicating a commute that begins after 6:00pm (17.5%). The primary mode of transportation used includes an individual's personal car (85%) and public transportation, such as a bus or train (10%). The majority of participants reported that they do not currently supervise other employees (67.5%).

Measures

Data were collected through a structured paper-and-pencil survey (see Appendix B). Measures included in this survey and relevant to this study are work-life satisfaction, home-life satisfaction, commute factors, demographics, and job-related information. No names were asked and demographic information was obtained for statistical purposes only (to describe the general sample).

Work-Life Satisfaction (see Section I, items 1 – 12, Appendix B). Twelve questions were included about work-life satisfaction. All items used a seven-point Likert-type scale, ranging from 1-very dissatisfied to 7-very satisfied. Questions were taken from a previous research study by Bunker et al. (1992). Four questions measured

Table 1

Participant Demographics and Commute-Related Information (N = 80)

Demographic Variables		Frequency	Percentage
Sex	Male	31	38.8
	Female	49	61.3
Marital Status	Single	15	18.8
	Married, living with partner	59	73.8
	Divorced, separated	4	5.0
	Widowed	2	2.5
Ethnicity	American Indian, Alaskan Native	1	1.3
	Black – African American	1	1.3
	Hispanic – Latino/Latina	4	5.0
	White/Euro-American	64	80.0
	Asian American – Pacific Islander	10	12.5
Education	High School	4	5.0
	College Graduate	39	48.8
	Some College	7	8.8
	2 Year College, Associate Degree	5	6.3
	Graduate Degree or Higher	25	31.3
Annual Salary	Below \$30,000	3	3.8
	\$31,001 - \$45,000	17	21.3
	\$45,001 - \$65,000	14	17.5
	\$65,001 - \$75,000	16	20.0
	\$75,001 - \$100,000	15	18.8
	\$100,000 - \$125,000	3	3.8
	Over \$125,001	6	7.5
Age	20 – 35	30	37.8
	36 – 50	19	24.2
	51 – 70	29	36.8
Number of Children	0	55	68.8
	1 – 2	22	27.5
	3 - 6	3	3.9
Job Status	Full-Time	77	96.3
	Part-Time	3	3.8

		Frequency	Percentage
Industry	Accounting/Finance/Banking/Legal	8	10.0
	Advertising/PR/Sales/Marketing	6	7.5
	Agriculture/Environmental	2	2.5
	Art/Entertainment/Journalism	5	6.3
	Biotechnology/Pharmaceutical	8	10.0
	Computer/Technology	6	7.5
	Education	13	16.3
	Government/Civil Service	2	2.5
	Healthcare/Health Services	5	6.3
	Real Estate/Property Management	7	8.8
	Retail/Merchandising	3	3.8
Job Tenure	0 – 5	64	82.1
	6 – 10	11	14.2
	11 – 15	5	6.4
Commute Distance to Work	0 - 10 miles	23	28.8
	11 - 25 miles	33	41.3
	26 - 40 miles	14	17.5
	41 - 60 miles	2	2.5
	More than 60 miles	8	10.0
Commute Time to Work	Less than 10 minutes	9	11.3
	11 - 30 minutes	37	46.3
	31 - 45 minutes	13	16.3
	46 - 60 minutes	11	13.8
	An hour and a half or longer	10	12.5
Commute Start Time To Home	5:30am – 7:00am	15	18.8
	7:00am – 8:00am	40	50.0
	8:00am – 9:00am	17	21.3
	9:00am or later in the morning	3	3.8
Mode of Transportation	Car	68	85.0
	Public Transportation - Bus	3	3.8
	Public Transportation - Train/Subway	5	6.3

participants' satisfaction with their overall work situation (e.g., How satisfied are you with your job?). Five questions measured participants' satisfaction with their quality of life (e.g., How satisfied are you with your ability to balance your work and personal life?). Three questions were used to measure participants' satisfaction with their current cost of living (e.g., I am happy with my current standard of living.). A composite score was determined by taking the average of all twelve items. A higher score indicated greater work-life satisfaction. Coefficient alpha reliability was .84.

Home-Life Satisfaction (see Section I, items 13 – 21, Appendix B). Nine questions were included to measure participants' overall satisfaction with their home and family life (e.g., How satisfied are you with the time you have available for your family and children?). Questions for home-life satisfaction were also taken from previous research by Bunker et al. (1992). All items used a seven-point Likert-type scale, ranging from 1-very dissatisfied to 7-very satisfied with an additional answer choice of "not applicable" for participants who were not currently married or living with a partner. A composite score was determined by taking the average of all nine items. A higher score indicated greater home-life satisfaction. Coefficient alpha reliability was .91.

Average Distance to Work (see Section III, item 17, Appendix B). Average distance (i.e., length) to work was measured by participant's response to the question "what is the average distance you travel to work, one way." Answer choices were (1) 0 – 10 miles, (2) 11 - 25 miles, (3) 26 – 40 miles, (4) 41 – 60 miles, and (5) more than 60 miles.

Average Commute Time to Work (see Section III, item 18, Appendix B). Average commute time to work was measured with the question “what is your average commute time to work one way.” Participant answer choices were (1) less than 10 minutes, (2) 11 – 30 minutes, (3) 31 – 45 minutes, (4) 46 – 60 minutes, and (5) an hour and a half or longer.

(Lack of) Traffic Control. (see Section II, items 29, 30 and 31, Appendix B).

Thirty-three items (see Section II, items 1 – 33, Appendix B) addressed commute factors, such as commute related choice, resentment, anxiety, fears and worries. Items were taken from previous research studies (Kluger, 1998; Gulian, Matthews, Glendon, Davies, & Debney, 1989; Novaco et al., 1990). The focal variable of this measure for this study is traffic control. It was measured by averaging scores given to three commuting questions, including “my normal driving speed is reduced by heavy traffic during my commute,” “it is impossible for me to avoid heavy traffic during my commute,” and “it is necessary for me to apply my breaks often during my commute to work.” A higher score indicates a decreased sense of control over one’s commute. Coefficient alpha reliability for these items measuring traffic control was .81.

Procedure

Using the snowball technique for collecting survey data, surveys and stamped pre-addressed (to author) return envelopes were distributed to friends and family of the author. All solicited participants currently live in the Northern California Bay Area or Central Texas. Each solicited participant was given extra copies of the survey with pre-addressed stamped return envelopes that were to be distributed to their contacts who

commute and who live in the specified California and Texas areas. Completed surveys were returned via postal mail. All surveys were anonymous. Participants were asked to voluntarily complete and return the survey within one week of receiving it. Because participation was anonymous and because the snowball effect was used, it was not possible to send follow-up reminders to participants who had been solicited.

RESULTS

Prior to testing hypotheses, demographic variables (marital status, educational attainment, age, salary, and ethnicity) were examined in relation to the main study variables to determine if any needed to be included as control variables in subsequent analyses. Significant differences were found in marital status categories and educational attainment categories on some of the study variables. In particular, married respondents and those living with partners differed significantly ($p < .01$) from divorced respondents on work-life satisfaction ($M = 5.32$, $SD = .87$, $n = 59$ and $M = 3.97$, $SD = 1.22$, $n = 4$, respectively). Those with graduate degrees had significantly ($p < .05$) higher scores on work-life satisfaction ($M = 5.57$, $SD = .73$, $n = 25$) than respondents with a bachelors degree or less education ($M = 5.12$, $SD = 1.00$, $n = 55$). Also, correlations between age and home-life satisfaction ($r = .66$, $p < .01$), were significant. Thus, in subsequent analyses, these variables, as well as dominant mode of transportation were controlled.

The first hypothesis, that mass transit commuters would report greater work-life satisfaction and home-life satisfaction than car drivers, could not be tested because more than four-fifths (85%) of the respondents indicated that they drove to and from work. Nonetheless, mode of transportation was controlled and respondents of modes other than car were not eliminated in order to ensure adequate power for subsequent analyses.

Second, Hypothesis 2, that there would be a difference in men and women's home-life and work-life satisfaction, was tested utilizing Analysis of CoVariance (ANCOVA). Covariates were sex, dummy coded education, dummy coded marital status, age, and dummy coded mode of transportation. Based on this analysis, men and

women did not differ significantly on either work-life satisfaction or home-life satisfaction. Men's work-life satisfaction averaged 5.23 (SD = 0.17) and their home-life satisfaction averaged 5.28 (SD = 0.24). Women's work-life satisfaction averaged 5.29 (SD = 0.13) and their home-life satisfaction averaged 5.11 (SD = 0.18). Because the samples came from both Texas and California, it was presumed there might be differences in men and women's responses based on location. However, another ANCOVA did not yield a significant interaction term between location and sex.

Next, to test Hypotheses 3 and 4, Multivariate ANCOVA was determined as the ideal analysis, because there were five nominal groups for each of commute distance and commute time. These five categories were ordered from least to most distance or time. For example, group 1 for commute time was less than 10 minutes and group 5 for commute time was 1 ½ hours or more. However, due to small and uneven cell sizes for each group, multiple correlation and regression analyses were performed instead.

Based on correlation analysis (see Table 2), as distance increased, work-life satisfaction decreased ($r = -.32, p < .01$), as did home-life satisfaction ($r = -.41, p < .01$). Similarly, as commute time increased, work-life satisfaction decreased ($r = -.27, p < .05$) and home-life satisfaction decreased ($r = -.42, p < .01$). Thus, hypothesis 3, that commute length would negatively correlate with home-life satisfaction was supported. In addition to testing the hypothesized relationship, commute control was correlated with both home-life and work-life satisfaction. As traffic control score increased (i.e., less control over the traffic during one's commute), home-life satisfaction decreased

($r = -.25, p < .05$). The correlation between control over traffic and work-life satisfaction was not significant.

Table 2

Means, Standard Deviations, Correlations, and Reliability Coefficients (N = 80)

Study Variables	<u>M</u>	SD	Study Variables				
			1	2	3	4	5
1) Work-Life Satisfaction	5.26	0.94	.84				
2) Home-Life Satisfaction	5.17	1.08	.72**	.91			
3) Average Distance Traveled to Work	2.24	1.19	-.32**	-.41**	--		
4) Average Commute Time to Work	2.70	1.22	-.27*	-.42**	.82**	--	
5) Lack of Traffic Control	4.34	1.65	-.16	-.25*	.26*	.39**	.81

Note. Alpha reliabilities are bolded on diagonal.

** $p < .01$; * $p < .05$.

Next, multiple regression analyses were employed to test Hypothesis 4, that sex or lack of control over traffic moderate the relationship between each of commute time and commute distance with both work-life and home-life satisfaction. Interaction terms between lack of control over traffic and both commute length factors (time and distance), as well as interaction terms between sex and both commute factors were computed (see Tables 3-6). Table 3 shows work-life satisfaction and home-life satisfaction regressed on control variables (age, dummy coded marital status,

dummy coded typical mode of transportation, and dummy coded education), followed by commute time, then lack of traffic control, followed by the interaction between commute time and lack of traffic control. Moderated regression analyses were performed similarly for each of the other predictor and moderator variables (see Tables 4-6). None of the expected moderator variables directly added significant variance in either work-life or home-life satisfaction after the commute length (time or distance) variable. Moreover, none of the interaction terms yielded significant variance in either work-life or home-life satisfaction. Thus, hypothesis 4 was not supported.

Table 3

Work-Life Satisfaction and Home-Life Satisfaction Regressed on Commute Time, Lack of Traffic Control, and their Interaction (N = 80)

Step	Variables	Outcome Variables			
		Work-Life Satisfaction		Home-Life Satisfaction	
		β	ΔR^2	β	ΔR^2
1	Controls		.25		.06
2	Commute Time	-.22	.05*	-.60	.16*
3	Lack of Traffic Control	-.05	.00	-.27	.01
4	Commute Time \times Lack of Traffic Control	-.02	.00	.31	.01

Note. Betas are those obtained in the fourth step. * $p < .05$.

Table 4

Work-Life Satisfaction and Home-Life Satisfaction Regressed on Commute Distance, Lack of Traffic Control, and their Interaction (N = 80)

Step	Variables	Outcome Variables			
		Work-Life Satisfaction		Home-Life Satisfaction	
		β	ΔR^2	β	ΔR^2
1	Controls		.25		.06
2	Commute Distance	-.49	.08*	-.61	.16*
3	Lack of Traffic Control	-.23	.01	-.31	.02
4	Commute Distance \times Lack of Traffic Control	.30	.01	.31	.01

Note. Betas are those obtained in the fourth step. * $p < .05$.

Table 5

Work-Life Satisfaction and Home-Life Satisfaction Regressed on Commute Time, Sex, and their Interaction (N = 80)

Step	Variables	Outcome Variables			
		Work-Life Satisfaction		Home-Life Satisfaction	
		β	ΔR^2	β	ΔR^2
1	Controls		.25		.06
2	Commute Time	.26	.05*	-.07	.16*
3	Sex	.42	.01	.21	.00
4	Commute Time \times Sex	-.68	.02	-.47	.01

Note. Betas are those obtained in the fourth step. * $p < .05$.

Table 6
Work-Life Satisfaction and Home-Life Satisfaction Regressed on Commute Distance, Sex, and their Interaction (N = 80)

Step	Variables	Outcome Variables			
		Work-Life Satisfaction		Home-Life Satisfaction	
		β	ΔR^2	β	ΔR^2
1	Controls		.25		.06
2	Commute Distance	-.28	.08*	-.49	.16*
3	Sex	.09	.00	.09	.00
4	Commute Distance \times Sex	-.04	.00	.07	.00

Note. Betas are those obtained in the fourth step. * $p < .05$.

DISCUSSION

This study set out to examine the relationship between mode of transportation, commute time, and commute length with work-life satisfaction and home-life satisfaction. The premise was that a person's commute and the choices he or she was able to make about his or her commute would have an impact on overall work-life and home-life satisfaction.

Landy and colleagues (1991) assert that commute time has a strong impact on a person's work-life and home-life satisfaction. The current study provides support for this assertion. Although there were insufficient numbers of commuters using modes of transportation other than cars (related to H₁) and given that there were no differences between men and women on work-life satisfaction and home-life satisfaction (as related to H₂), commute time, and commute length, lead to poorer home-life satisfaction and work-life satisfaction.

Regarding sex differences, Novaco and colleagues (1990; 1991) found that commute stress negatively affected women more than men. Lack of differences in the current study might be attributed to sample size, sampling technique, and history. Due to the snowball effect, many of the respondents in the current study had similar backgrounds and living situations. For example, a majority of the respondents had a college degree, were married, and their spouse or partner also worked. Biographical diversity among participants might have been limited.

Another factor contributing to the lack of difference between men and women's responses may be history-related. Novaco and colleagues' (1990; 1991) studies were

published in the early 1990s. At that time commuting men and women were also performing sex-related, traditional household duties (Anderson & Spruill, 1993). It is possible that married participants of the current study (whose spouses also work) have adjusted to sharing household duties.

It was also found that increases in commute time and distance yields more dissatisfaction with home-life. This lower home-life satisfaction might be a result of combined frustrations of work-life and commute. Westman and Etzion (1995) found that when a person is dissatisfied with one area of his or her life, it might spillover to other areas of his or her life. Although the current study does not have sufficient data to test this presumption, future studies should examine if home-life satisfaction differs among people with long versus short commutes and high versus low levels of job stressors. This is important to consider because, while long commutes (time/distance) might decrease home-life satisfaction, according to this current study's findings, long commutes might also lessen the effects of spillover (from work to home) by creating a longer pause between work and home. This pause might allow a person to unwind before getting home and keeping that person's work-life from spilling over to his or her home-life.

Alternatively, a short commute versus a long commute might allow a commuter to get home faster and feel that he or she has more time to spend at home. A feeling of being home faster and, thus, having more time at home, might ultimately lessen spillover from work-life to home-life whereas long commutes might have the opposite effect. Another explanation for lower home-life satisfaction is that greater commute distances and time means less time at home, which means less time to partake in home-life

activities. Less time at home negatively affects interpersonal interactions among family members, thereby resulting in lower levels of home-life satisfaction (Wharton & Blair-Loy, 2006). Wharton and Blair-Loy found that women were particularly negatively affected by long work days and time away from their families. When married couples or partners spent more time with their families by reducing work hours so that their combined work week was 60 hours, both men and women reported greater family satisfaction than couples who worked longer hours (Hill et al., 2006).

The fourth hypothesis addressed the effects of commute control and sex over a person's work-life and home-life satisfaction. The hypothesis stated that perceived control and sex would each have moderating effects on work-life and home-life satisfaction. This hypothesis was not supported. That commute control did not moderate the relationships between commute time and both work-life and home-life satisfaction is consistent with Kluger (1998).

Part of the difficulty in linking control to commute length (i.e., time and distance) and both work-life satisfaction and home-life satisfaction might be that there are numerous other variables affecting control, such as individual self-efficacy, perceived controllability of a situation, and personal intention (Rhodes & Courneya, 2003). Control might also be linked to learned helplessness, such that chronic exposure to commuting impedances lowers a person's self-efficacy and overall sense of control (Evans & Stecker, 2004).

Another limitation to control as a moderator is that commuters often have no control over their commutes, particularly once the commute is in progress. In the current

study, one of the limitations for studying control may be that respondents' commute length (i.e., time and distance) was not substantially long enough for the respondents to have a desire for more control. Alternatively, it might be that between the respondent's home and commute destinations, there were too few commute options or routes that they felt could be controlled. Distance and time might be viewed as an unchangeable aspect of a person's commute and, therefore, having control over a commute might not shorten the overall distance or time of the commute. Indeed, the United States Department of Transportation (2004) indicates that commute distance will continue to be an increasing problem for workers as they opt to drive longer distances to get to work. Thus, respondents might have gotten used to the commute tactics and accepted them as part of one's lifestyle. Another important point to consider is weather. For example, snow, and impedance in some parts of the country, is not a concern in the Northern California Bay Area or Central Texas. Perhaps for these reasons control did not strongly impact participants' reported work-life satisfaction or home-life satisfaction.

In keeping with the findings of Bird and Bird (1984), a possible reason that sex was not linked to commute time or distance as a moderator of work-life and home-life satisfaction might be that more individuals are now sharing household duties. Sharing of household duties might alleviate some of the sex-role pressures (e.g., meal preparation, child care, cleaning) that might have otherwise negatively impacted a lengthy commute for women.

Limitations and Future Research

This study is not without limitations. First and foremost is the small sample size which limits power and the type of analyses performed. For example, there were insufficient cell sizes to compare how different modes of transportation relate with work-life satisfaction and home-life satisfaction because a majority of the participants in the current study commuted to work using their own personal car rather than public or other forms of transportation. Future studies should include larger samples of individuals commuting to work using mass transportation to determine if constraints of transportation timing or control have an impact on work-life satisfaction and home-life satisfaction. Further research also needs to examine if there are differences between men and women who use different modes of transportation and their resulting home-life satisfaction and work-life satisfaction.

Another limitation is the lack of ethnic diversity among the sample. In research conducted by Elliott and Joyce (2004), ethnicity (assessed in terms of race) and sex in relation to commute length and reliance on transportation. They found that Black and Latina women obtained employment requiring longer commutes from home than White women. Black and Latina women were also more likely to rely on mass transportation than White women. Future studies should include a culturally diverse sample in order to study ethnicity as a covariate of the relationship between commuting and both work-life satisfaction and home-life satisfaction.

A third limitation was that the current study only collected data from one individual in a marital or partnered relationship. Future research should look at the

effects of commuting on both individuals in a marital or partnered relationship where either one or both partners commute for work. In situations where both partners commute, the commute factor might add strain to home-life satisfaction as commute time and distance becomes a concern for both and not just one person. This becomes particularly relevant for couples who need to get home to care for others' (e.g., children or elderly parents).

Conclusion

Findings from this study are important for both employees and employers. Commute length and commute time negatively relate with work-life satisfaction and home-life satisfaction. Thus, employees should take into account commute length (time and distance) when considering jobs and the necessary commute. Likewise, employers should be aware of the impact that long commutes can have on their employees and look for ways to assist and support employees with long commutes. Examples of support include telecommuting and flexible work hours. Studies (e.g., Tausig & Fenwick, 2001) on these work arrangements suggest that carefully, well-planned telecommuting schedules can have positive impacts on work-life and home-life satisfaction (Golden, Veiga, & Simsek, 2006).

These findings are also relevant to mass transit industries. Although it was impossible to determine if mass transit users had greater work-life or home-life satisfaction than private car drivers, knowing that long time and distance negatively relate with work-life and home-life satisfaction is a place to begin promoting mass transit transportation.

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APPENDIX A

Human Subjects Institutional Review Board Approval Letter



San José State
UNIVERSITY

**Office of the Provost
Associate Vice President
Graduate Studies & Research**

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To: Jennifer Alexander

From: Pamela Stacks, Ph.D.
Associate Vice President
Graduate Studies and Research

Date: June 21, 2006

The Human Subjects-Institutional Review Board has approved your request to use human subjects in the study entitled:

“The Relationship of Commuting with an Individual’s Work-Life Balance”

This approval, which provides exempt status under Category B, is contingent upon the subjects included in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects’ identity with regard to all data that may be collected from the subjects. The approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Dr. Pamela Stacks, Ph.D. immediately. Injury includes but is not limited to bodily harm, psychological trauma, and release of potentially damaging personal information. This approval for the human subject’s portion of your project is in effect for one year, and data collection beyond June 21, 2007 requires an extension request.

Please also be advised that all subjects need to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject’s participation, refusal to participate, or withdrawal will not affect any services that the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact me at (408) 924-2480.

cc. Dr. Sharon Glazer, DMH 232-0120

The California State University:
Chancellor’s Office
Bakersfield, Channel Islands, Chico,
Dominguez Hills, East Bay, Fresno,
Fullerton, Humboldt, Long Beach,
Los Angeles, Maritime Academy,
Monterey Bay, Northridge, Pomona,
Sacramento, San Bernardino, San Diego,
San Francisco, San José, San Luis Obispo,
San Marcos, Sonoma, Stanislaus

APPENDIX B
Survey Instrument



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A Study of Commute Factors in Relation to Stress

Informed Consent Form

This survey is to be voluntarily completed by **typical daytime business hour workers, employed by one organization**, who are **not currently students**. The purpose of this survey is to obtain information about commute factors and habits as they relate to work and personal life. This information is being acquired for research purposes only. Your responses will remain **anonymous**. The researcher will not have access to personal information about potential participants; no one will be able to identify you.

The questionnaire is divided into 3 sections. The first section asks about your general work, life, family, and relationship satisfaction. Section two asks about your specific commute factors and overall organizational commitment. The last section asks about your specific commute details and demographics. These last questions are asked in order to describe the sample on which these data were obtained. This information will not and cannot be used to identify anyone.

Completion of this survey is entirely voluntary. You may withdraw at any time. By completing and submitting it, you are, in effect acknowledging that completion of the survey was voluntary. Questions in this survey are not expected to cause harm or discomfort to any participant. Overall results of this study may be published.

The questionnaire will take approximately 15 minutes to complete. **Please complete and return the survey with the attached envelop within one week of receipt.**

Should you have any questions, comments, or concerns, please call me at (415) 673-3255. For further information or questions you may also contact Sharon Glazer, Ph.D., thesis research advisor at (408) 924-5639. For further concerns about the research study, please contact Dr. Sheila Bienenfeld at (408) 924-5600. Questions about research subjects' rights, or research-related injury may be presented to Pam Stacks, Ph.D., Associate Vice President, Graduate Studies and Research at (408) 924-2480.

Thank you for your time and effort. It is greatly appreciated!

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Fullerton, Humboldt, Long Beach,
Los Angeles, Maritime Academy,
Monterey Bay, Northridge, Pomona,
Sacramento, San Bernardino, San Diego,
San Francisco, San José, San Luis Obispo,
San Marcos, Sonoma, Stanislaus

Section I:

Instructions: Please indicate the extent to which you are satisfied with the following items by marking the appropriate number, from 1 (very dissatisfied) to 7 (very satisfied). *If you are not married or living with a life partner, please skip questions pertaining to spouse or life partner.

	Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Neither Satisfied/Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied
Work/Life Satisfaction							
How satisfied are you with your current work situation?	1	2	3	4	5	6	7
How satisfied are you with your job?	1	2	3	4	5	6	7
How satisfied are you with the time you have available for your work?	1	2	3	4	5	6	7
How satisfied are you with your ability to be the kind of worker you would like to be?	1	2	3	4	5	6	7
How satisfied are you with the degree to which you are able to meet your supervisor's expectations of you at work?	1	2	3	4	5	6	7
I would be happier living somewhere that has a lower cost of living.	1	2	3	4	5	6	7
I am happy with the quality of life that I lead.	1	2	3	4	5	6	7
To what extent do you generally feel that you have more to do than you can get done?	1	2	3	4	5	6	7
How stressful would you say your current lifestyle is for you as an individual?	1	2	3	4	5	6	7
I am happy with my current standard of living.	1	2	3	4	5	6	7
I believe the cost of living where I live is reasonable.	1	2	3	4	5	6	7
How satisfied are you with your ability to balance your work and personal life?	1	2	3	4	5	6	7
Home-life and Relationship Satisfaction							
How satisfied are you with the time you and your life partner have to spend together?	1	2	3	4	5	6	7
How satisfied are you with the time your life partner has available for your relationship?	1	2	3	4	5	6	7
How satisfied are you with the amount of physical intimacy you have with your life partner?	1	2	3	4	5	6	7
How satisfied are you with the time you have available for yourself?	1	2	3	4	5	6	7
How satisfied are you with your family life?	1	2	3	4	5	6	7
How satisfied are you with the time you have available for your family and children?	1	2	3	4	5	6	7
How satisfied are you with the time your partner has available for your family/children?	1	2	3	4	5	6	7
All in all, how satisfied are you with your overall life?	1	2	3	4	5	6	7
All in all, how satisfied are you with your current lifestyle?	1	2	3	4	5	6	7

Section II:

Instructions: Please indicate the extent to which you agree or disagree with the following statements by marking the appropriate number, from 1 (strongly disagree) to 7 (strongly agree).

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree/Disagree	Somewhat Agree	Agree	Strongly Agree
Commute Factors							
I decide what type of transportation I use to commute to and from work.	1	2	3	4	5	6	7
More than one mode of transportation to work is available to me.	1	2	3	4	5	6	7
I can only take one route to work.	1	2	3	4	5	6	7
I have flexible work hours at my job.	1	2	3	4	5	6	7
My commute gives me private time to relax.	1	2	3	4	5	6	7
My commute positively affects my productivity on the job by giving me energy.	1	2	3	4	5	6	7
I resent the length of my commute.	1	2	3	4	5	6	7
I resent the hassles my commute causes me.	1	2	3	4	5	6	7
My commute negatively affects my productivity on the job because it takes time out of my day.	1	2	3	4	5	6	7
I often fear for my personal safety during my commute due to seeing accidents.	1	2	3	4	5	6	7
I often fear for my personal safety during my commute due to other unsafe drivers.	1	2	3	4	5	6	7
I often fear for personal safety during my commute due to roads in disrepair.	1	2	3	4	5	6	7
I often fear for personal safety during my commute due to bad weather.	1	2	3	4	5	6	7
My commute causes me to worry about constantly being under time pressure.	1	2	3	4	5	6	7
My commute causes me to worry about accidents.	1	2	3	4	5	6	7
My commute causes me to worry about my mental health.	1	2	3	4	5	6	7
My commute causes me to worry about negative feelings.	1	2	3	4	5	6	7
My commute causes me to worry about hostility.	1	2	3	4	5	6	7
I am worried to drive in bad weather.	1	2	3	4	5	6	7
I am always ready to react to other drivers' unexpected maneuvers.	1	2	3	4	5	6	7
Driving usually does not make me happy.	1	2	3	4	5	6	7
In general I do not enjoy driving.	1	2	3	4	5	6	7
Driving usually makes me feel frustrated.	1	2	3	4	5	6	7
I feel confident in my ability to avoid an accident.	1	2	3	4	5	6	7
I am more anxious than usual in heavy traffic.	1	2	3	4	5	6	7
I am tenser on new and unfamiliar roads.	1	2	3	4	5	6	7
I am usually patient during the rush hour.	1	2	3	4	5	6	7
I feel I have full control in scheduling my work hours.	1	2	3	4	5	6	7
My normal driving speed is reduced by heavy traffic during my commute.	1	2	3	4	5	6	7
It is impossible for me to avoid heavy traffic during my commute.	1	2	3	4	5	6	7
It is necessary for me to apply my breaks often during my commute to work.	1	2	3	4	5	6	7
My commute time leaves little time for other activities.	1	2	3	4	5	6	7
My commute does not negatively affect my quality of life.	1	2	3	4	5	6	7

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree/Disagree	Somewhat Agree	Agree	Strongly Agree
Organizational Commitment							
I would be very happy to spend the rest of my career with my current company.	1	2	3	4	5	6	7
I enjoy discussing my current company with people outside of it.	1	2	3	4	5	6	7
I really feel as if my current company's problems are my own.	1	2	3	4	5	6	7
I think I could easily become as attached to another company as I am to my current one.	1	2	3	4	5	6	7
I will actively look for a new job in the next year.	1	2	3	4	5	6	7
I do not feel "emotionally attached" to my current company.	1	2	3	4	5	6	7
My current company has a great deal of personal meaning for me.	1	2	3	4	5	6	7
I do not feel a strong sense of belonging to my company.	1	2	3	4	5	6	7
I am not afraid of what might happen if I quit my job without having another one lined up.	1	2	3	4	5	6	7
I often think about quitting.	1	2	3	4	5	6	7
Too much in my life would be disrupted if I decided I wanted to leave my current company now.	1	2	3	4	5	6	7
It would <u>not</u> be too costly for me to leave my current company in the near future.	1	2	3	4	5	6	7
Right now, staying with my company is a matter of necessity as much as desire.	1	2	3	4	5	6	7
I feel that I have too few options to consider leaving my current company.	1	2	3	4	5	6	7
One of the few negative consequences of leaving my current company would be the scarcity of available alternatives.	1	2	3	4	5	6	7
One of the major reasons I continue to work for my current company is that leaving would require considerable personal sacrifice - another company may not match the overall benefits I have here.	1	2	3	4	5	6	7
I do not feel like "part of the family" at my company.	1	2	3	4	5	6	7
It would be very hard for me to leave my company right now, even if I wanted to.	1	2	3	4	5	6	7
I will probably look for a new job in the next year.	1	2	3	4	5	6	7
I think that people these days move from company to company too often.	1	2	3	4	5	6	7
Things were better in the days when people stayed with one organization for most of their careers.	1	2	3	4	5	6	7
I do not believe that a person must always be loyal to his or her company.	1	2	3	4	5	6	7
Jumping from company to company does not seem at all unethical to me.	1	2	3	4	5	6	7
One of the major reasons I continue to work for my current company is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.	1	2	3	4	5	6	7
If I got another offer for a better job elsewhere I would not feel it was right to leave my current company.	1	2	3	4	5	6	7
I was taught to believe in the value of remaining loyal to one company.	1	2	3	4	5	6	7
I do not think that wanting to be a "company man" or "company woman" is sensible anymore.	1	2	3	4	5	6	7

Section III: Commute Characteristics

Instructions: Please answer the following questions about your current commute. This information is critical to this research study. Most of the questions below are answered by marking a number. Some ask you to write a number or words.

1. In the past month, how many days have you been late to work? (Put "0" if you do not have to be at work by a certain time.) _____
2. Do you report hours worked **and** get paid for overtime? Yes No
3. Do you generally carpool to and from work? Yes No
4. Do you have a choice about your mode of transportation to and from work? Yes No
5. Does your mode of transportation dictate the specific time you travel to and from work each day? Yes No
6. How many months and years have you been doing your current work commute? ____ Years, ____ Months
7. Years/months at current employer ____ Years, ____ Months
8. Do you supervise other employees? Yes No
If yes, how many? (Please write in the number.) _____
9. If married or living with your partner, does your spouse/partner work? Yes No
10. If married or living with your partner, does your spouse/partner work outside of the home? Yes No
11. If married or living with your partner, does your spouse/partner work:
 - a) Full-Time
 - b) Part Time (less than 40 hours per week)
 - c) N/A
12. What is your primary mode of transportation to and from work?
 1. Car
 2. Motorcycle
 3. Bicycle
 4. Public Transportation – Bus
 5. Public Transportation – Train/Subway
 6. Other: Please specify

13. If you have a secondary mode of transportation, what do you use?
1. Car
 2. Motorcycle
 3. Bicycle
 4. Public Transportation – Bus
 5. Public Transportation – Train/Subway
 6. Other: Please specify _____
 7. Not Applicable
14. Do you work part-time or full-time?
1. Full-Time (approximately 8 hours during typical daytime business hours)
 2. Part-Time (please specify) _____
 3. Other (please specify) _____
15. In what industry sector are you currently employed?
1. Accounting/Finance/Banking/Legal
 2. Advertising/PR/Sales/Marketing
 3. Agriculture/Environmental
 4. Art/Entertainment/Journalism
 5. Biotechnology/Pharmaceutical
 6. Computer/Technology
 7. Education
 8. Government/Civil Service
 9. Healthcare/Health Services
 10. Hospitality/Restaurant
 11. Real Estate/Property Management
 12. Retail/Merchandising
 13. Other: _____
16. Where are you commuting from? _____ City/Town _____ to City/Town _____
17. What is the average distance you travel to work, **one-way**?
1. 0 – 10 miles
 2. 11 – 25 miles
 3. 26 – 40 miles
 4. 41 – 60 miles
 5. More than 60 miles
18. What is your average commute time to work **one-way**?
1. Less than 10 minutes
 2. 11 – 30 minutes
 3. 31 – 45 minutes
 4. 46 – 60 minutes
 5. An hour and a half or longer
19. What time do you typically start your commute **to** work?
1. 5:30am – 7:00am
 2. 7:00am – 8:00am
 3. 8:00am – 9:00am
 4. 9:00am or later in the morning
 5. Other, please specify _____
20. What time do you typically start your commute home from work?
1. 1:00pm – 2:30pm
 2. 2:30pm – 4:00pm
 3. 4:00pm – 5:00pm
 4. 5:00pm – 6:00pm
 5. 6:00pm – or later in the evening
 6. Other, please specify _____

Demographics

Instructions: For purposes of statistical analysis only, please answer the following questions about yourself. Your answers will remain anonymous. However, this biographical data is crucial to this research study. Most of the questions below are answered by marking a number. Some ask you to write a number or words.

1. Sex (Please circle one)
 - Male
 - Female

2. Marital Status
 1. Single
 2. Married or, living with partner
 3. Divorced, separated
 4. Widowed
 5. Other, please specify _____

3. Ethnicity
 1. American Indian – Alaskan Native
 2. Black – African American
 3. Hispanic – Latino/Latina
 4. White/Euro-American
 5. Asian American – Pacific Islander
 6. Other (please specify)

4. What is your highest level of education?
 1. Some high school
 2. High School graduate
 3. College Graduate
 4. Some college
 5. 2 Year College or Associate Degree
 6. Graduate Degree or Higher

5. Your Annual Gross Salary
 1. Below \$30,000
 2. \$31,001 - \$45,000
 3. \$45,001 - \$65,000
 4. \$65,001 - \$75,000
 5. \$75,001 - \$100,000
 6. \$100,001 - \$125,000
 7. Over \$125,001

6. Age as of your last birthday _____

7. Number of dependent children _____