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GEBZE TECHNICAL UNIVERSITY

INSTITUTE OF SOCIAL SCIENCES

**THE RELATIONSHIP BETWEEN COMMUTING AND WITHDRAWAL
BEHAVIOR**

ONUR EMRE

DOCTORAL DISSERTATION

DEPARTMENT OF BUSINESS

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G.Y.T.E. Sosyal Bilimler Enstitüsü Yönetim Kurulu'nun tarih vesayılı kararıyla oluşturulan jüri tarafından tarihinde tez savunma sınavı yapılan tez çalışması İşletme Anabilim Dalında DOKTORA tezi olarak kabul edilmiştir.

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ÖZET

Bu çalışma, günlük işe gidiş ve işten dönüş maliyetlerinin iş tatmini ve işten geri çekilme davranışlarına etki edip etmediğini ve nasıl etki ettiğini incelemeyi amaçlamaktadır. Bu ilişkileri incelemek üzere 210 kişilik bir örneklem üzerinde, internet ortamında tasarlanıp uygulanan bir zaman kesiti analizi yapılmıştır. İlişkileri incelemek üzere lineer regresyon analizi ve bir SPSS eklentisi olan PROCESS kullanılmıştır. Elde edilen veriler üzerinde yapılan analizler sonucunda işe gidişin zaman maliyeti ile geri çekilme davranışları arasında; işe gidişin parasal maliyeti ile işten geri çekilme davranışı arasında ve işe gidişin zaman maliyeti ile iş tatmini arasındaki ilişkiler istatistik olarak anlamlı bulunmamıştır. Bununla birlikte iş tatmininin, işe gidiş maliyetleri ile işten geri çekilme davranışı arasındaki ilişkiye olan düzenleyici (moderator) değişken etkileri de istatistik düzeyde anlamlı bulunmamıştır. İşe gidişin parasal maliyetinin iş tatminini doğrudan azalttığı sonucuna ulaşılmış, iş tatmininin işe gidişte harcanan zamanın ve parasal maliyetin işten geri çekilme davranışlarına olan etkisine dolaylı olarak aracılık ettiği sonuçlarına ulaşılmıştır.

Keywords: *İşe gidiş; işten geri çekilme davranışı; üretkenlik karşıtı davranışlar, iş tatmini*

ABSTRACT

The purpose of the study is to check if the costs of commuting reduces job satisfaction and lead to withdrawal. A cross-sectional design is implemented by electronic surveys through a snowball sampling (N=210) . Regression analysis and SPSS extension called PROCESS is used. Study could not generate enough statistical power to point out a relationship between the time spent during the commute and withdrawal behavior, between the money spent during the commute and withdrawal behavior, between time spent during the commute and job satisfaction. The hypothesized interaction of job satisfaction both on the relationship between the time spent during the commute and withdrawal, and the money spent during the commute and withdrawal behavior are not supported. The results concluded that monetary costs of commuting reduces job satisfaction, job satisfaction mediates the relationship between the time spent during the commute and withdrawal behavior. Job satisfaction also found to mediate the relationship between monetary costs of commuting and withdrawal behavior.

Keywords: commuting; withdrawal; counterproductive, satisfaction.

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1. INTRODUCTION

This study aims to discuss the daily routine of almost every employee, their daily trips to and from work, in organizational and human resource management contexts. This daily routine is especially consequential in industrialized communities and across metropolitan areas, with its individual and organizational outcomes and environmental and economical externalities. Commuting distances and time spent travelling to work is clearly increased within recent decades along with increased costs to workers, organizations and costs to the environment.

The main purpose of the study is to investigate the possible negative outcomes of commuting experiences. While allowing or helping employees reach their desired position in job market and desired wage level at work; daily commuting experience has almost no positive outcome to speak of, and it is often a burden in terms of monetary and time costs. Commuting is an important daily routine for the individual and it has various effects on employers ranging from mood swings to financial savings. It is the first hurdle to tackle for the current day and it is the first problem encountered concerning the location of the workplace among all other possible problems. Problems or perceptions of those problems usually lead to dissatisfaction and the personal responses to these problems are mainly counterproductive or may even be destructive. Denominated as withdrawal behaviors; lateness, absence and turnover are costly to the organizations and to the employees. As being filtered through many cognitive processes, these behaviors are the last measures for an employee to resort in order to avoid the workplace or getting even with the organization.

This study is designed to contribute to the existing body of research on withdrawal behavior and it is among the few researches where commuting experiences are standing on the forefront. In this study, awareness about the problem of commuting and an understanding about the commuting experiences of workers are among the main targets. Possible outcomes of the commute; whether it is pleasant or bad; and consequences of the commuting with a focus on job satisfaction and withdrawal behavior will be discussed. For organizations, this study

will attempt to provide some insight about the elimination of withdrawal behavior that stems from the unpleasant commuting experience. Through eliminating such withdrawal behavior, organizations could conduct more stable relationships with their existing employees and costs associated with commuting can be avoided.

In countries with severe unemployment and at least some degree of urbanization, commuting is almost inevitable and compensating the commute by searching for jobs nearby or changing residences by the workers are rarely the solution to the problem. While skilled workforce is scarce and their commute is inevitably unpleasant, it is often tolerated by the worker himself with all its possible outcomes. In a job market where the unskilled workforce is plenty and cheap to hire, employers are usually indifferent or ignorant to such problems of the "ordinary" employees. Beyond being indifferent to the commuting problem, residing close to the workplace is often a requirement imposed to the bottom line. This study will be among the few which commuting and withdrawal behavior are associated and studied in a developing economy, where labor markets are relatively shallow and network of transportation is less advanced or almost primitive.

This study will also enable us to discuss about the actions can be taken by the employer to overcome any problems related to commuting. The study will discuss the possible effects of commuting on satisfaction and withdrawal behavior and will also try to provide some insight for the readers and for the future researchers, employers and organizational decision makers.

Introduction of various fringe benefits by the employer to the commuters or slight modifications in the working conditions are among the possible solutions mentioned in the discussion section. While working from a remote location might be an option for relevant and suitable professions; the use of company cars, car pooling practices within the organization among commuters, employer provided shuttles, flexible arrival and departure hours for the commuters, compressed work weeks for suitable jobs are all among other possible solutions for the problem, as those solutions are proven to be valid as successful mechanisms to overcome possible negative consequences of commuting by some companies.

2. COMMUTING AS AN ORGANIZATIONAL CONCEPT

Decentralization of job opportunities and residential areas have altered commuting behaviors, distances, costs and outcomes (Rouwendal, 1999) (Ben-David & Sharabi, 2009). The rise of poly-centric cities and the spread of employers across those cities have complicated travelling to and from work, thus generated organizational consequences (Clark, Huang and Withers, 2003) as it makes individuals worse off, increases stress (Koslowsky, Aizer and Krausz, 1996) and makes people believe they are undercompensated (Stutzer and Frey, 2008). Despite the costs of commuting; Stutzer and Frey (2007) mentioned that travelling longer distances can be tolerated if there are advantages associated with commuting such as better income and more desirable living environment.

Commuting should be evaluated on several dimensions such as commuting mode, distance and speed. Individuals mainly assess their journey based on their travel mode (vehicle in that sense) but also holding distances constant, relatively high speed commuters are considered less stressful on their trips. But in some instances, the speed can increase commuting costs as there are costs to achieve the higher speed (Gottholmseder, Nowotny, Pruckner, & Theurl, 2009). While financial considerations play a major role in selecting the commuting method, according to Costa, Pickup, & Martino (1988) availability of roads, public transportation opportunities and geographical structure of cities are also important factors on the mode, distance and speed.

Along with increases in productivity due to a pleasant commute; motivation level, financial savings and employment opportunities also enhance according to the quality of the commute. Individual time and monetary costs and individual consequences such as distortion of work – life balance, increases in health issues and increased stress, rise of environmental concerns such as carbon emissions and traffic congestions should be considered.

As it has been an equilibrium decision for workers in residential and financial decisions, the work of Costa et al. (1988) states that the main cause of the daily

trips of half of the commuters is the difficulty in finding close residences to the workplace locations. This difficulty may arise both from a limited supply of available houses or the prices of those available housing alternatives. Almost same proportion of commuters state that they would sustain their commuting status for the current job, and they are even willing to travel further for prospects of finding more satisfying and better paid jobs. Thus a commuter individual is likely to change jobs or is in a search of new residences, in search for both in some instances (Gottholmseder et al., 2009).

Job dissatisfaction and job mobility are among the several consequences of commuting (Novaco, Stokols and Milanese, 1990). A study in the United States found that 48% of working adults reported greater job dissatisfaction due to commuting, 32% took commuting into consideration upon deciding on their current job, 27% of the respondents reported that they could perform their duties from home and 15% reported they would change their job for a shorter commute (*Road Wage Survey*, 2011). According to Kluger (1998) long distance commuting can easily be associated positively with tardiness, absenteeism and job dissatisfaction. According to Koslowsky (1997); a decrease in performance, increases in job dissatisfaction and organizational withdrawal are can be considered as consequences of the commuting experience.

For commuting workers within the organization, some companies provide various subsidies for transportation in the form of transit passes, provide options to telecommute, and design compressed work weeks. Some of them promote car pooling and provide shuttle buses sometimes with wireless internet connections (Cohen, 2006). Also in terms of helping employees avoid the rush hour traffic, employers are advised to schedule employees in interchangeable fashion for the early hours in the morning and for the departure hours at the end of the work day (*Road Wage Survey*, 2011). Allowing workers to have flexible starting and quitting times might eliminate the feeling of urgency and help them lower the levels of perceived driving stress (Lucas & Heady, 2002). Also, according to the extensive work of (Puigarnau, 2011) about company cars; these cars are widely used as a useful fringe benefit for employees in order to ease their commuting experience.

Being an mostly urban and a modern day problem; the problem of commuting has different consequences for every individual worker, depending on their income level, their organizational and family status. This set of problems can vary according to gender, age and marital status; especially in families with children and for dual career-dual - earning couples. Different aspects of commuting could be observed for various levels in the organization, especially for positions requiring strict attendance or for superior positions that are able to delegate their jobs at least temporarily (Gottholmseder et al., 2009). Changes in commuting routines of workers due to the changes in the location of the workplace may be an important concern for companies deciding to change their addresses or locations, as it alters the costs, modes and the duration of the commute for the employees (Wener & Evans, 2011). In order to reach and to retain a high quality workforce, commuting and its drawbacks need more attention from organizations.

3. COUNTERPRODUCTIVE BEHAVIOR

To this date, various concepts have been used to describe the behaviors that are considered unfavorable within the organization. These concepts can be seen as classified in the work of (Spector et al., 2006). These unfavorable behaviours can be named deviant behaviors (Spector et al., 2006), counterproductive behaviors (Spector et al., 2006), antisocial behavior (Hanisch & Hulin, 1991), dysfunctional behaviors and finally misbehavior (Hanisch & Hulin, 1991). Throughout this study, each of these are accepted and may be used interchangeably.

First of all, having the ability to engage in counterproductive behavior or attempting to exhibit counterproductive behavior relies on the availability of a feasible environment. This feasibility may stem from the job itself or from some environmental factors related to the job (Hanisch & Hulin, 1990). The main concern for organizational researchers to deal with such behavior is simply the costs associated with such behavior, whether it is financial or otherwise.

Counterproductive behavior, as its nature suggests, should be directed to the organization or organization related parties, such as other members of the organization or customers, and should be intentional rather than being unintentional. According to Hanisch and Hulin (1990) this voluntary and intentional pattern makes counterproductive behavior distinguishable from other organizational behavior concepts (such as burnout) of unintentional nature, which are not under direct control of the employee. Also, counterproductive or deviant behavior need not always be purely unethical. Organizational policies which are considered as norms, are sometimes in conflict with relevant laws or general justice system. Even though intentional and voluntary behaviors have motivational roots, sometimes counterproductive behavior occurs as a lack of motivation to follow the expectations of the organization.

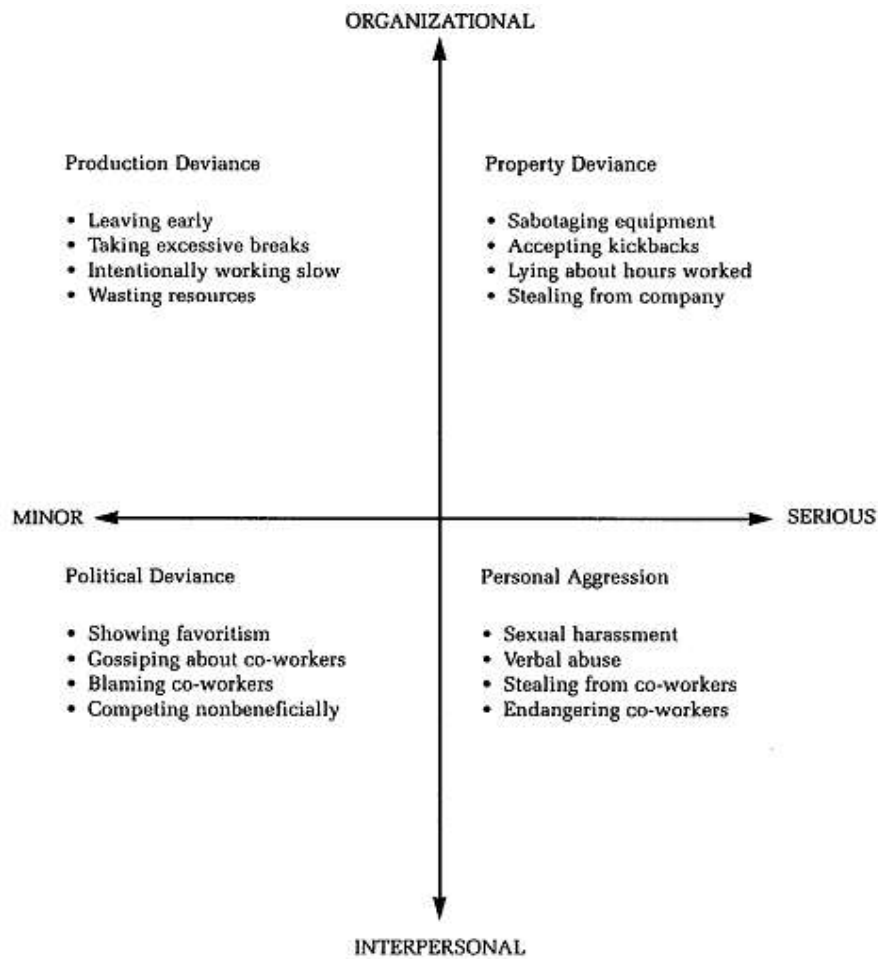


Figure 3.1 - Robinson and Bennett Typology of Deviant Workplace Behavior

Presented here is the work of Judge and Hulin (2009), as seen in Figure 1, deviant behaviors are classified into two groups depending their organizational or interpersonal target, and classified according to the magnitude; as the deviant behaviors being serious or minor.

Along with other studies that are trying to classify counterproductive behaviors, these behaviors are sometimes studied under different but relevant subjects such as aggression and revenge. According to Spector et al. (2006) these behaviors often have an overlapping pattern. Studies that attempt to classify those behaviors have evolved into specifying the behavior along with assigning them in the relevant dimensions.

Table 3.1 - Short version of counterproductive work behavior checklist by Fox, Penney, Bruursema, Goh, Kessler, 2006.

Purposely wasted your employer's materials/supplies	Sabotage
Purposely damaged a piece of equipment or property	Sabotage
Purposely dirtied or littered your place of work	Sabotage
Came to work late without permission	Withdrawal
Stayed home from work and said you were sick when you were not	Withdrawal
Taken a longer break than you were allowed to take	Withdrawal
Left work earlier than you were allowed to	Withdrawal
Purposely did your work incorrectly	Production deviance
Purposely worked slowly when things needed to get done	Production deviance
Purposely failed to follow instructions	Production deviance
Stolen something belonging to your employer	Theft
Took supplies or tools home without permission	Theft
Put in to be paid for more hours than you worked	Theft
Took money from your employer without permission	Theft
Stole something belonging to someone at work	Theft
Told people outside the job what a lousy place you work for	Abuse
Started or continued a damaging or harmful rumor at work	Abuse
Been nasty or rude to a client or customer	Abuse
Insulted someone about their job performance	Abuse
Made fun of someone's personal life	Abuse
Ignored someone at work	Abuse
Blamed someone at work for error you made	Abuse
Started an argument with someone at work	Abuse
Verbally abused someone at work	Abuse
Made an obscene gesture (the finger) to someone at work	Abuse
Threatened someone at work with violence	Abuse
Threatened someone at work, but not physically	Abuse
Said something obscene to someone at work to make them feel bad	Abuse
Did something to make someone at work look bad	Abuse
Played a mean prank to embarrass someone at work	Abuse
Looked at someone at work's private mail/property without permission	Abuse
Hit or pushed someone at work	Abuse
Insulted or made fun of someone at work	Abuse

As seen in **Error! Reference source not found.**, Spector et al. (2006) classified counterproductive behavior in 5 sub-categories; sabotage, withdrawal, production deviance, theft and abuse.

In this study, either call it dysfunctional or counterproductive, or even deviant; withdrawal behaviors are in the focus. Withdrawal behavior can simply be described as avoiding from dissatisfying work situations (Spector et al., 2006). By using withdrawal as a tool, employer tries to remain as a part of the organization, but at the same time he tries to minimize the time spent in the organization and minimizes the contribution. While maintaining organizational membership, individuals withdraw themselves from their roles in the organization, or sometimes

from the organization itself physically (Johns, 2004). Along with these undesirable patterns, withdrawal on the other hand, has no destructive nature as compared to other forms of counterproductive behavior such as theft.

3.1. Withdrawal Behavior

Employee withdrawal is simply the avoidance from the workplace. Employee attempts to decrease the participation in the workplace, either as being present in the workplace or being absent. These reductions in participation can be achieved as being a member of the organization, can emerge as intentions to quit and can progress its way to actually quitting (Blau, 1998). Employee withdrawal may be the outcome of dissatisfaction or a result of perceptions of unfair treatment and injustice (Fox, Spector, & Miles, 2001), mistreatment and grievances (Laczo & Hanisch, 2000). And even sometimes, co-workers might be the reason behind withdrawal behavior (Bawa & Jantan, 2005).

Employee withdrawal can be visible in various ways. According to Bawa and Jantan (2005) these are; tardiness (lateness), absenteeism and turnover. In some situations, none of these elements are visible, but loss of employee involvement is the main case instead of being physically out of work. As those are being various ways of dealing with an underlying problem, forms of withdrawal usually follow a progressive pattern among themselves, sometimes a single form of withdrawal might be capable of coping the underlying problem. In such situations, if tardiness or lack of involvement is sufficient in compensating the employee's perception of a problem, turnover may not be necessary. Rooted back in the famous "Taviscock Research", one view argues that tardiness is being the mildest form of withdrawal and unresolved issues generally finds its way to turnover, as turnover being the most aggressive form of withdrawal. As in the work of Clark, Peters, and Tomlinson (2005), this progression is expressed as lateness being the precursor of other forms of withdrawal.

According to Spector et al. (2006), withdrawal behavior decreases the amount of working time required by the organization. As seen on **Error! Reference source not**

found. and mentioned before, “absence, arriving late or leaving early, and taking longer breaks than authorized” are various forms of withdrawal and finally permanent form of withdrawal is “turnover”.

3.2. Absenteeism

According to Johns (2004); absenteeism can be defined as the failure to report or being present for scheduled work. As stated by Martocchio and Harrison (1993) and Harrison and Martocchio (1998), “absence is an individual's lack of presence, at a given time and location when there is an expectation for him or her to be there physically”. Absenteeism is the most easy to detect among other withdrawal behaviors as it extends to a full day at work Gruys and Sackett (2003). Also it is the most widely and extensively studied form of withdrawal (Spector et al., 2006).

It can easily be predicted that absenteeism is costly to the organizations. This is the main reason that absenteeism studies; efforts started almost a century ago (Ones, Viswesvaran, & Schmidt, 2003) along with to the endeavor to find solutions, and to understand the mechanisms. According to the century old body of knowledge, job satisfaction is the most often used variable to predict absenteeism, along with other minor antecedents which are out of scope for this study (Harrison & Martocchio, 1998).

Role of personality have been thought among the most important one in withdrawal research. Neuroticism (Ones et al., 2003), anxiety and conscientiousness are found to be highly related to absenteeism (Bernardin, 1977) where extraversion and conscientiousness are also strong predictors of absenteeism (Judge & Martocchio, 1997). According to the study of Judge and Martocchio (1997) conscientious employees are less prone to absenteeism and they are less likely to withdraw from work when dissatisfied, due to their view of the duty and responsibilities. Usually associated with hedonism, carelessness and excitement seeking; extroverts are expected to be more absent. Along with the personality; job characteristics have the moderating role on the effect of personality on absence.

For example extroverted workers are more likely to be absent on routine jobs as it might be more boring than introverts may perceive.

Before personal, social and organizational variables that might affect the absence, there has to be a motivation to attend that goes along with the ability to attend. According to the summary of Steers and Rhodes model of employee attendance by Brooke (1986); ability to attend is determined by states of illness, family responsibilities and finally by transportation issues, and their interaction with job satisfaction, which can be considered as constraints. And also, these models offer a good opportunity to distinguish between voluntary and involuntary absenteeism.

Among the most valuable phrases about absenteeism is probably stated by Yolles, Karone and Krinsky (1974) in their book "Absenteeism in Industry". In the book, authors state that 10% of the workforce is responsible for the 90% of the overall absenteeism (Garrison & Muchinsky, 1977). The concept of "absence proneness", likelihood to be absent, is introduced based on this inspiration and after that previous evidence of absenteeism have been found among the most important estimators of present absenteeism (Judge & Martocchio, 1997). All those information provide reasons to put emphasis to the investigation of absence.

Lateness can simply be described as the failure to show up on time, either for the beginning of a work shift or anytime that is previously scheduled at work. For all organizations, it can be a burden, both financially and psychologically. According to Blau (1995) these burdens as costs includes productivity declines and supervisory efforts to monitor such behavior for reduction and discipline. And those behaviors usually raise the temptation for other workers to follow the undesired example.

Especially in service organizations rather than production, where physical interaction is the essential case, or wherever the work performed by the late employee is critical, lateness becomes an extremely important concern (Koslowsky, 2000). This concern is raised in almost a-century-old and highly cited work of Motley (1926), and it is clearly stated that lateness requires some degree of monitoring and control (Blau, 1995). Beyond concerns of labor productivity, it can be seen as a

matter of punctuality and it is a precise estimator of future withdrawal behavior, all the way from shirking to absenteeism and finally turnover (Clark et al., 2005).

Commuting usually distorts the rational use of time, according to Costa et al. (1988), it affects the proper organization and management of time, often due to the variability of the commuting conditions. Those variabilities can be a result of the unreliabilities of transportation services, delays due to the road constructions or accidents, or just due to increased traffic volume. As a result of this variability, whether it is public transport or private vehicle use, or even being a pedestrian for walking distances, lateness is frequently the outcome of any commute. Since travel time is not easily predicted by the commuter for the any of the commuting modes due to the mentioned unreliable nature of them and their dependance of environmental factors, it is highly the case for commuters to arrive late for work.

Finally turnover is the strongest form of withdrawal behavior, and it is especially important as it might be a permanent, single and a final act of an ongoing series of withdrawal process (Spector et al., 2006). Although there may be benefits of turnover such as stated in the work of Staw (1980) such as the reduction of chronic interpersonal conflict in the workplace, increased workforce mobility, increased morale and innovativeness; these benefits are usually outweighed by more visible costs. According to the same study, turnover is almost always associated with costs rather than benefits because of the processes that have to be repeated on the aftermath. Costs of recruitment, personnel selection and workforce training, and possible orientation problems of newcomers are among the costs that make turnover an important organizational problem.

4. JOB SATISFACTION

Job constitute a major part of modern human life. People spend their entire education to increase their chances of finding a promising job. One of the biggest fear is losing the job and no one wants to be in a job that is not satisfying. One's job is an integral part of his or her identity and it is extremely important to be content and satisfied with it.

Job satisfaction is probably the most widely studied topic in organizational behavior and it is not a coincidence. It is affected by many personal, cultural and organizational characteristics and it is salient on wide range of organizational outcomes. A review study by Judge, Parker, Colbert, Heller, and Ilies, n.d.(2004) states that there are over 10000 studies on job satisfaction in scientific journals and despite the decline in the number of job satisfaction studies, it remains its central role in industrial and organizational psychology. Even though there is a decline in the interest in job satisfaction, it remains its role as one of the most important constructs in organizational behavior as it has strong ties with many other theories and other constructs, and it has important practical implications for the industry.

According to the well known and widely accepted definition, "job satisfaction is a pleasurable and positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976). It can be simply put as an employer's feelings towards the job.

The concept of job satisfaction can be traced all the way back to famous researcher Elton Mayo and famous Hawthorne Studies (Landy & Conte, 2010). Elton Mayo was the one who introduced the concept of emotions to the work psychology, arguing that the work brings some negative emotions. In the early 1930's Robert Hoppock was interested in happiness of the workers in various workplaces. He investigated how happy were workers in some occupations and some workplaces are happier than others and discovered both job-related and individual differences might influence the job satisfaction. And also Hawthorne

Studies are important as the results show that even though the conditions are worsened, increased attention leads to productivity.

When it comes to defining what satisfies people or what makes people feel good about their work can be summed under two categories. One is the situational determinants of job satisfaction. According to Aldag and Kuzuhara (2002) work itself with its challenges, personal demands and interesting features of work, rewards associated with work, physical and psychological working conditions, other people in the organization such as supervisors, co workers and subordinates, the structure of the management and the organization and finally the fringe benefits are situational determinants of job satisfaction. On the other hand, the dispositional views on job satisfaction supports the view that job satisfaction is predicted by positive affectivity or negative affectivity of people, saying that even faced with identical situations, different people will react differently according to their characteristics. Appreciating the importance of situational factors, some people have higher or lower levels of satisfaction regardless of the situation.

According to dispositional views, negative or positive affectivity plays the major role in the levels of job satisfaction. Negative affectivity can be summarized as a constant feeling of low satisfaction. Individuals with negative affectivity feel negative feelings like anger, disgust, guilt, fear and nervousness more than other people throughout their life, and they tend to focus on negative aspects of their surroundings. According to the studies focus on people with negative affectivity, they tend to feel dissatisfied with their work, regardless of the job and the employer (Noe, Hollenbeck, Gerhart, & Wright, 2011)

Core self evaluations are also an important part of the dispositional views. People have varying levels of job satisfaction, according to their positive or negative core self evaluations. People with positive core self evaluations are also high in self esteem and therefore they are confident in their abilities and they are usually emotionally stable. They tend to seek change if they are faced with unfavorable conditions and they try to obtain positions with desirable characteristics. Often, the

result is more satisfaction when compared to the people with negative core self evaluations (Judge, Bono, & Locke, 2000).

In order to discuss the dispositional source of job satisfaction, personality types should be considered as a valuable predictor. In a meta-analysis of the studies between 5 factor model of personality and job satisfaction Judge, Heller, and Mount (2002) found that neuroticism correlates with job satisfaction consistently and higher in magnitude than the remaining traits. Extraversion is also found to be positively related to job satisfaction. Negative relationship between neuroticism and job satisfaction and extraversion together constitutes the happy person and happy life brings job satisfaction or job satisfaction can lead to a happier life. In the mentioned meta-analysis, the second larger correlation between job satisfaction and personality traits is conscientiousness. On the other hand agreeableness and openness to experience demonstrated relatively weak correlations with job satisfaction.

To discuss further about dispositional views of job satisfaction, a meta analytic study by Judge and Bono (2001) provides important results between job satisfaction and four important traits; self-esteem, self-efficacy, locus of control and emotional stability. According to the meta analytic results, all four traits can be considered dispositional predictors of job satisfaction.

The work itself is also as important in comparison to personality upon evaluating the predecessors of job satisfaction. The task itself, task complexity and repetitiveness, physical demands of the job and the level of strain, the value associated with the task are among the sources of satisfaction. Uncertainty in expectations from the employer, role conflict and role overload are also among the important predictors of job satisfaction (Noe et al., 2011). Employees will show dissatisfaction if they are not sure about the expectations from them, if they experience inconsistencies in methods, schedules and performance criteria because every individual has varying values on these topics. Too many expectations and vague roles also tend to lower the levels of job satisfaction.

Among other traditional antecedents of job satisfaction, Landy and Conte (2010) proposed a number of variables that would probably predict job satisfaction. Satisfaction can be really sensitive to job security, especially in fluctuating economies. Time urgency of the organization can trigger dissatisfaction if there is a mismatch between the organization and the individual. Discrimination in the workplace, among its other downsides, clearly detrimental to the levels of job satisfaction. Parallel with discrimination, diversity and multi-cultural structure of the workplace can be a concern. Modern production models and applications, technology intensity and its integration to the work can affect the level of satisfaction.

Job satisfaction is a combination of many things and these can be named as dimensions. It is a fine balance between those dimensions. What constitutes the overall satisfaction is dependent on various dimensions and any of these are important. (Locke, 1976) collected job dimensions from previous research in 9 categories as work itself, pay, promotions, recognition, benefits, working conditions, supervision, co-workers, company and management.

Work itself, as stated previously, is satisfactory if it offers chances of success, if it contains opportunity for learning and if one has the autonomy over the speed and the method. Pay dimension is very important as it is the main reason for people to go to work. The amount of pay is definitely important, but the perceived fairness in wages should also be considered. Promotion opportunities can sometimes compensate the lack of other things, people can resist and tolerate many issues for a better position, and that is also sensitive to the fairness of the promotion system. Recognition means the credit for the good work and proper feedback. Benefits besides the pay are also very important, especially for the employees who are in need of a better health care, proper pension plan, etc. Annual leave, the amount of paid vacations and various perks are especially satisfactory when used optimally. Working conditions of the company, intensity of work and tightness of the work day, location of the workplace, the equipment and machinery use, temperature, ventilation, humidity etc. can be problematic in some jobs for some

people and those can generate dissatisfaction regardless of the level of satisfaction from other dimensions.

People in the organization, especially matter and it can be an important factor in job satisfaction. Supervision and the style of management play a major role in the satisfaction of the workers. Human relation structure and co-workers; solidarity and help among people in the organization, friendliness are always good predictors of job satisfaction.

Even though pay dimension is important, there are some opposing results provided by (Judge, Piccolo, Podsakoff, Shaw, & Rich, 2010). According to their meta analysis, they found a small correlation between pay and job satisfaction. Pay satisfaction shares its correlation with other dimensions of job satisfaction. And also, people are quick to adapt their level of satisfaction and as time passes, they quickly return their prior satisfaction levels and pay dimension loses its satisfactory value. Pay may or may not be satisfactory under certain circumstances, but it will still be overall motivator.

Having a satisfying job or job dissatisfaction can demonstrate its effects, even in non-work areas. Judge and Ilies (2004) state that having a satisfying or dissatisfying job can effect employees' mood at home and that mood can be contagious and can also effect other people around. Job satisfaction is also important in non work domains as it has spillover effects on many aspects of life. Life satisfaction and overall positive attitudes towards non work issues can spill over into work life and can effect job satisfaction. Spillover model can explain the behavior of most people but also it is important to note that there are people whose behavior cannot be explained with spillover model. Some people tend to compensate the job or life dissatisfaction in either work or non work domains whichever is more satisfying. For some people job and life satisfaction can be completely distinct and and their work or non work satisfaction cannot effect each other (Judge & Watanabe, 1994).

It is also important to discuss job satisfaction in the context of some demographic indicators. Age is among the most important demographic to take into

consideration upon discussion of any job attitude. Gibson and Klein (1970) found a positive relationship between age and job satisfaction, even with its dimensions like satisfaction with pay, satisfaction with job and satisfaction with the supervision. In the study this result is justified with explanations about cognitive shifts with age, change in needs and priorities and a process of losing edges in life. But they also controlled the effects of tenure as it can artificially increase the correlation due to increased salary and better position due to seniority and better jobs due to the increased experience. Age and tenure combined, the relationship between age and job satisfaction can be described as U shaped. The U shape also confirmed by the study of Clark, Oswald, and Warr (1996) on a sample from Britain, they argue that the job satisfaction declines from its initial moderate levels in the earlier years of employment, than increases until the retirement.

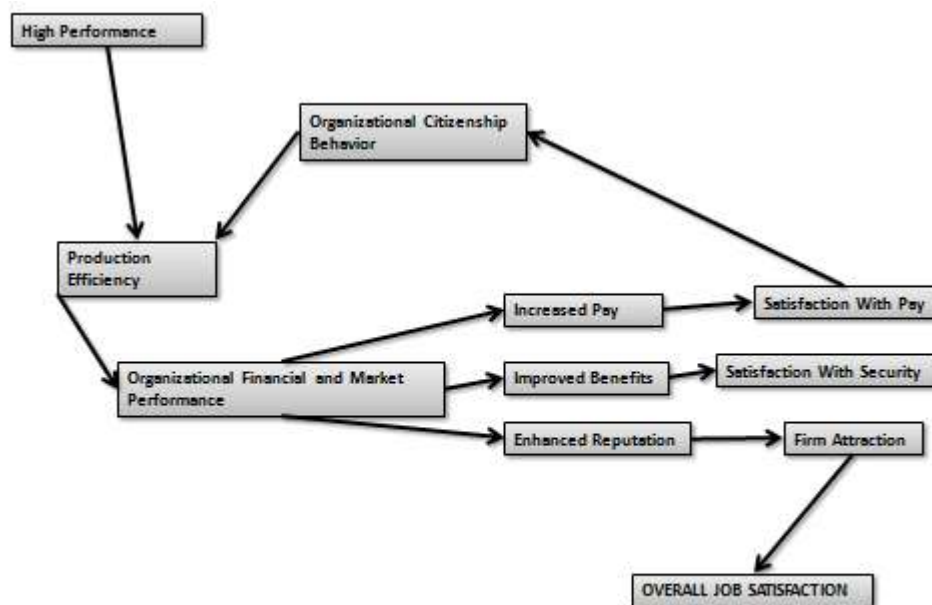


Figure 4.1 - Antecedents of Job Satisfaction (Schneider, Hanges, Smith, & Salvaggio, 2003).

Results from the studies that examine the relationship between gender and job satisfaction can be seen contradictory, as some studies found women to be more satisfied than men, others found men to be more satisfied than women. But all these studies found small differences between gender, if controlled with number

of other variables that might have artificially create bias one gender against another (Oshagbemi, 2003). With those studies that have found no significant difference between men and women in their levels of job satisfaction; a study by Chiu (1998) finds that women have lower levels of job satisfaction due to their disadvantages in working life. According to the study, they experience lower levels of satisfaction because their influence at work is relatively lower and they have lower promotional opportunities. Given similar levels of expectation in the working life, women as a disadvantaged group can experience lower levels of satisfaction. Another study on gender and job satisfaction conducted with 1600 workers from United States found that people working in gender balanced work groups have higher levels of job satisfaction as compared to the people working in homogenous gender work settings (Fields & Blum, 1997). According to the study, especially in groups containing mostly male individuals, employees have the lowest level of job satisfaction, whereas the most heterogeneous group of employees has the highest level of satisfaction.

Organizational culture and job satisfaction relationship is also worth to mention. A study by Lund (2003) investigated the clan culture, adhocracy culture, hierarchy and market culture with their relationship to job satisfaction. Both clan culture and adhocracy culture are associated with high levels of job satisfaction than market culture and hierarchy culture. It is important to note that while main determinants of the clan culture is loyalty and tradition, adhocracy culture is known to have an emphasis on entrepreneurship and innovation. On the other hand market culture is known with its emphasis on competition and hierarchy culture includes strict rules and increased levels of bureaucracy.

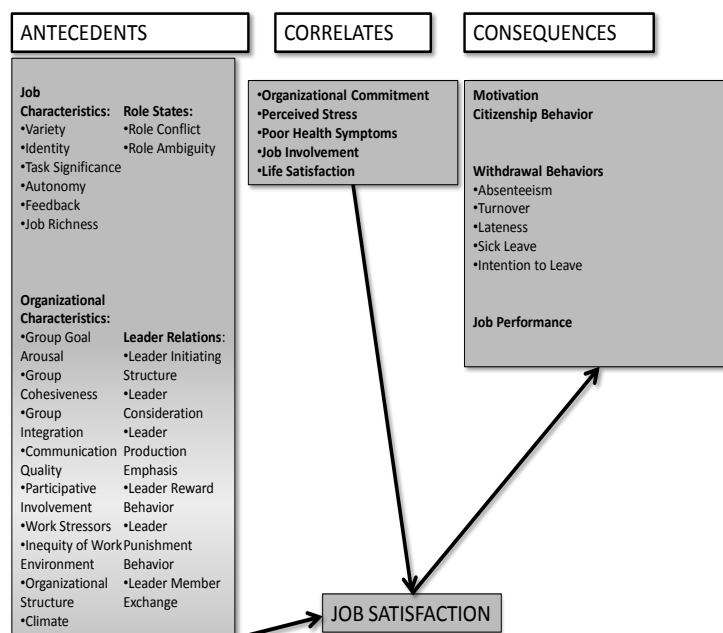
Discrepancy and perceived fairness, works as a predictor of job satisfaction among people. Satisfaction can be an interaction between the job outcomes and the expectations from the job. The difference between the expectation and the outcome in that sense can be viewed as a discrepancy and can retain the employee to get satisfaction from the job. In addition to the discrepancy between desires and outcomes, overall fairness determines the level of job satisfaction (Johns, 1996). According to the definition, distributive justice or distributive fairness is achieved

when expectations from work is in equilibrium with the work outcomes. If people can receive what they think they deserve, they would perceive distributive justice. And deviations from that equilibrium can generate dissatisfaction according to equity theory, which is a comparison of the ratio of individual inputs and outputs to other people's input output ratio.

As Johns (1996) stated, if workers have to spend eight hours at work in a single day, and if they have to do it five days a week, it is a good idea for them to have positive attitudes toward the job. Job dissatisfaction obviously have some consequences for people. More satisfied workers are psychologically more healthy. Satisfied workers are also happy in non work aspects of their lives. Feelings of accomplishment and worth through a satisfying work can spill over into the non work life (Jamal & Mitchell, 1980).

Even though the association is relatively small, absence is one of the most widely accepted consequence of job dissatisfaction (Johns, 1996). As previously mentioned, it is costly and destructive. Another form of withdrawal, turnover is considered more destructive and costly than absenteeism and also regarded as a consequence of job dissatisfaction.

Table 4.1 - Antecedents, Consequences and Correlates of Job Satisfaction (Kinicki, Mckee-ryan, Schriesheim, & Carson, 2002)



It has long been thought that job performance suffers if the level of job satisfaction is low. But it also has been replaced by the belief that perceived performance causes job satisfaction. Leaving aside which one is a better explanation of the interaction whether satisfaction brings performance or performance leads to satisfaction, all that matters is that they are inseparable. High productivity as an outcome of high performance should be rewarded reasonably so it can increase the level of job satisfaction. Measures to increase job satisfaction should be implemented to promote better performance (Johns, 1996).

One important outcome of job satisfaction is that it generates organizational citizenship behavior (LePine, Erez, & Johnson, 2002). It promotes organizational effectiveness in various indirect ways and ways that are beyond those stated in the job description. It brings voluntary efforts to work that are otherwise will be out of question.

Finally Barling, Kelloway, and Iverson (2003) found that satisfied employers are less prone to accidents and they are they are less likely to experience occupational injuries in the workplace.

5. RESEARCH MODEL AND HYPOTHESES

Any employee weighs the costs and benefits of a particular job opportunity in any given time. In the job search period, the job seeker searches for the jobs within the same city, among the jobs that are close to the residency and jobs that are easy to access every day. As van den Berg and Gorter (1997) stated, commuting cost is an important determinant of job search behavior. As costs increase, the job seeker becomes reluctant to accept faraway jobs, or prefers relatively closer ones even if those jobs offer lower wages.

This reluctance about faraway jobs continues even when the individual actually finds a suitable job opportunity. It is the “stress that does not pay” and it generates the lowest level of positive affect and lowest level of enjoyment throughout the day (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004; Kahneman & Krueger, 2006). In order to endure a long commute, individuals have to derive or expect a form of utility from it, as it is the most disliked activity during the day, even above the work itself (Krueger, Kahneman, Schkade, Schwarz and Stone, 2009). There is a wide set of effects about the trips between home and work that are expected to result in physiologic and psychological responses, lower productivity along with increased absenteeism (Koslowsky, 1997) and lateness (van Ommeren and Gutiérrez-i-Puigarnau, 2011).

People often find themselves trapped as long commuters either from the fear of changing jobs or changing residences, or as a result of the non-availability of alternative transportation systems. Commuter status is imposed by environmental factors and clearly reduces the personal time, especially the time dedicated to sleep. Soon the avoidance from long worktrips exhibit itself as withdrawal behaviors, a subset of counterproductive behavior. Commuting distances still tend to increase as cities are becoming overcrowded and spanning to larger areas in recent years in developing countries, despite the stabilized figures of U.S. either due to the increase in telecommuting or the weak economic growth (Plummer, 2013).

Commuting time is adopted as a measure as used in (Gottholmseder, Nowotny, Pruckxner, & Theurl, 2009). Study hypothesizes longer commutes lead to withdrawal behaviors either directly, under moderation of job satisfaction or whether it mediates the relationship among job satisfaction and withdrawal. According to the majority of work related to absenteeism have found relationships between job satisfaction and absenteeism, as absenteeism is being a compensation for dissatisfaction (Brooke, 1986).

Any obstacle in comfortable commuting can effect the decisions to participate the working life. As the job seeker lives in the far residential locations, faces increases the fixed costs of participating the labor force (Ben-David & Sharabi, 2009). These participation expenses are especially important for demographic variables, especially for women, families with children, dual career couples etc.

Clearly, it is impossible for all employees live close to work, since there are limited residential options around workplaces. In accordance with the argument that commuting behavior is related to the functioning of labor, housing and transportation markets (Rouwendal & Nijkamp, 2004), the employee might want to compensate the reduced utility from any of these markets in the other market. As a rational equilibrium decision, long trips are worth travelling only if compensated financially or intrinsically, through welfare gains from living in a pleasant environment, getting paid high wages or paying low commuting costs as the latter two generates the same monetary outcome (Stutzer & Frey, 2008).

Paying higher prices to travel to work is undoubtedly an unpleasant experience, sometimes its even more than the amount paid for food. Car ownership and car using costs, gas expenses, ticket prices for public transportation, child-care expenses for dual career couples and families with children or maybe the high rates of rents or the costs associated with house ownership should be considered as commuting's direct and indirect costs to the individual. The majority of the trips are made by public transportation as it is relatively economical for many people, but despite its lower costs for some occasions, it generates discomfort as a result of

crowding, noise, vibration, heat or cold and possible changes or transfer of vehicles (Costa et al., 1988).

Commuting cost is an important determinant when someone considers his or her willingness to accept a job offer, evaluates the wage offered prior to the job, or even decides to stay in the job. This study puts forward the argument that as the commuting costs increase, employees are more likely to exhibit withdrawal behaviors. Along with the monetary costs of commuting, time also an important part of the commuting costs (Van Ommeren and Fosgerau, 2009) and also there is always a tradeoff between wages and costs. According to those arguments, this study hypothesizes as follows:

- *Hypothesis 1: Time spent during the commute is positively related to withdrawal behavior.*
- *Hypothesis 2: Monetary costs of commuting are positively related to withdrawal behavior.*
- *Hypothesis 3: Time spent during the commute is negatively related to job satisfaction.*
- *Hypothesis 4: Monetary costs of commuting are negatively related to job satisfaction.*

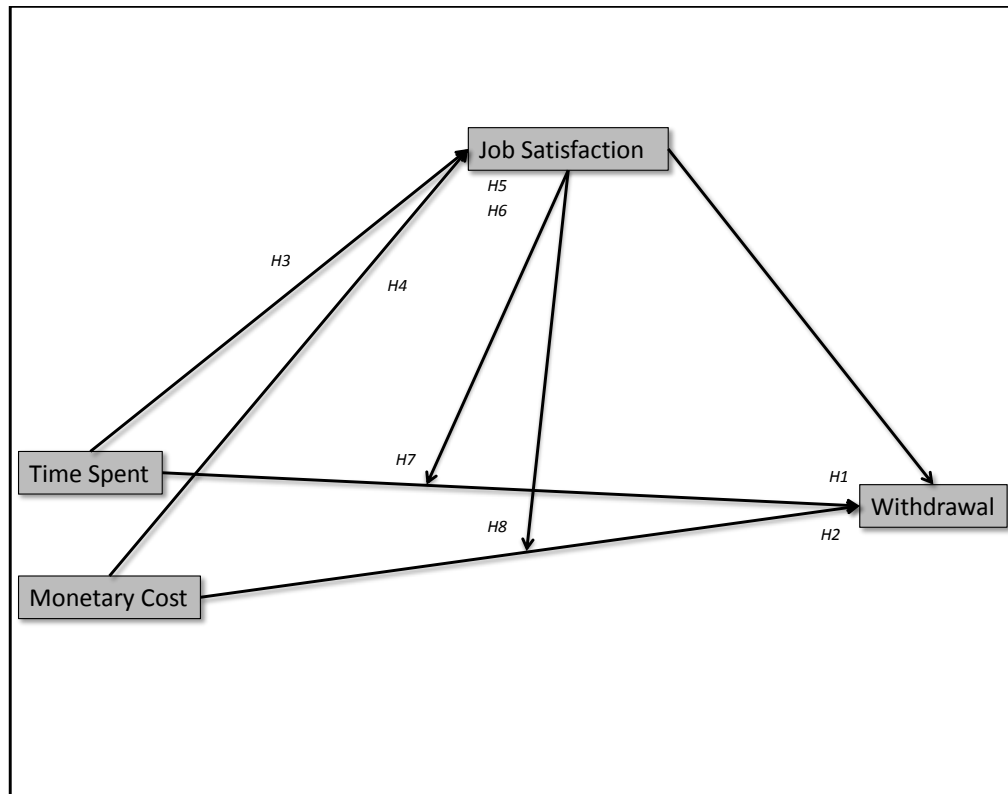


Figure 5.1 - Model of the Study

Indirect Effects of Commuting Costs on Withdrawal Through Job Satisfaction

Withdrawal behaviors are the outcomes of the perceptions of injustice, mistreatment, abuse etc. and sometimes even co-workers are the reason for people to avoid the workplace (Hanisch and Hulin, 1991) (Bawa and Jantan, 2005). But among all, job satisfaction is generally accepted as the main reason of employee withdrawal (Robbins and Judge, 2010).

Job satisfaction has been subject to the studies of withdrawal as it is regarded as the main predictor of withdrawal behaviors by many researchers. It has negative impact on withdrawal behaviors, affecting employees attitudes towards their job by reducing general health of the worker both in terms of physical health and psychological (Hanisch & Hulin, 1991). Borrowing the argumentation from the theory of planned behavior (Ajzen, 1991), one can argue that dissatisfied individuals tend to exhibit withdrawal behaviors, hoping to find themselves in a more satisfying status, either by being late, or not showing up for work at all, or by changing workplaces within the same employer and finally by quitting or changing jobs. It is

an instrument that helps workers escape from stressors and dissatisfaction in the workplace (Spector et al., 2006).

Costa et al. (1988) states that commuters and non commuters differ significantly on their levels of job satisfaction, only about 28% of the commuters were found to be satisfied with their jobs. As proposed in the work of Brooke (1986); the relationship between the predecessors and withdrawal behavior is mediated by job satisfaction and this mediating relationship is pretty much consistent throughout studies. Similarly, this study proposes that the costs of commuting indirectly effect withdrawal behavior through job satisfaction, as job satisfaction being both a mediator and a moderator. Any commuting experience is hypotesized to be prone to generate an effect on withdrawal behavior depending on the individuals level of satisfaction from its job.

- *Hypothesis 5: Job satisfaction mediates the relationship between the time spent during the commute and withdrawal behavior.*
- *Hypothesis 6: Job satisfaction mediates the relationship between the monetary cost of commuting and withdrawal behavior.*
- *Hypothesis 7: Job satisfaction moderates the relationship between the time spent during the commute and withdrawal behavior.*
- *Hypothesis 8: Job satisfaction moderates the relationship between the monetary cost of commuting and withdrawal behavior.*

5.1. Participants and Procedure

Responses were collected among working adult population through snowball sampling. For data collection purposes, an electronic survey is designed and sent to participants using their e-mail adresses. Along with the electronic survey, an exact duplicate of the electronic survey is created as a print version, for those who are unable to reach by e-mail, or reluctant to participate through e-mail. Although the availability of the print version, all respondents chose to participate through the e-mail version.

Electronic survey is designed by using an online survey creating website. Respondents were asked to participate by providing the survey link in the text body of e-mail and they are asked to invite their professional networks, acquaintances, friends and family to the study. Not limiting the profession or industry helped us achieving a diverse sample. As a natural side effect of this e mail snowball method, a response rate cannot be generated.

All constructs were assessed with validated scales. Survey consists of a job satisfaction scale, created by Spector (1985). This scale seems suitable for this study's purposes, as it is widely accepted in the field and it extensively covers various facets of job satisfaction. Spector's multi dimensional job satisfaction scale has various translations available for many languages. In this study, the original scale in English were translated to Turkish with a consideration to cultural characteristics and linguistic differences, and the standard and convenient translation – back translation method was implemented for the process. Participants responded using a 5-point Likert scale ranging from 1 (*disagree very much*) to 5 (*agree very much*).

Items about the withdrawal behavior were taken from Gruys and Sackett (2003) study of counterproductive behavior. Items represent poor attendance in general, a form of counterproductive behavior equivalent to withdrawal. The translation – back translation method was also used for this scale. Using a response format ranging from 1 (*never*) to 5 (*always*), we asked participants to indicate the frequency with which they behaved as such. A sample item was "Intentionally come to work late". Instead of requesting the exact or approximate number of days being absent or being late, individual opinions and statements of their behavioral frequency seemed to be more convenient, as it enabled this study to have a general opinion towards withdrawal items rather than reliance on a recollection of the past behavior. Relying on the self declaration of the frequency of one's withdrawal behavior is usually expected to be under the pressure of socially accepted norms. An individual might response as the person the employer would like, but still, it is more convenient as compared to reaching employment records of withdrawal behaviors, as they are confidential. And along with the reports being

highly confidential; such a record keeping would be very rare among organizations for any kind of withdrawal behavior.

Absenteeism is probably the only behavior that is easy to observe and it is frequently documented. On the other hand; lateness and early departure are relatively less documented and those are harder to observe unless there are automated systems to keep these records in the workplaces. Intentions to quit, opinions about the location of the workplace, feelings toward telecommuting and part time working are almost never measured or documented.

A semantic scale is designed to gather information about the money spent on commuting as a proportion to the income (How much do you spend for commuting as a proportion to your income?). With a single response option, 1 is considered no expenditure or very little expenditure relative to income, 5 stands for spending extreme amounts to commute relative to income. All choices were based on the participants' self judgments. For the opinions about the proportion, the minimum response option was set to be up to 5% and the maximum response option was set as above 51%. The time spent during the commute was asked through the same method (How much time do you spend during your commute, both ways?). A single response scale was also used for this question. The minimum response option was set as "20 minutes or less" and the maximum response option was set as "100 minutes or more" including both going to work and coming back from work. Semantic scales about the monetary costs of commute and time spent during the commute are taken from the European Quality of Life Survey and 5th European Survey of Working Conditions and adapted to our survey by simplification.

The information about the preferred mode of transportation was collected through predefined check boxes, by clustering similar type of vehicles in the same checkboxes. For this purpose, for example: "underground train, surface train and tram or streetcar were appointed to the same category, thus they shared the same response option. Similarly; company car or employer provided shuttle options were appointed to another category and a similar approach was used for all other methods of transportation.

A question is designed to gather information on whether going to work or coming back from work is painful for the participant. And finally common demographic questions such as gender, age, about marital status, question about the family asking whether there is a single-earner or dual earner in the family, weekly working schedule of the employee, number of years worked in the same company, the number of years worked in total and the level of education were surveyed.

After the data collection process, the data is processed with IBM Spss Statistics version 21. All the preliminary analyses, descriptive statistics and basic regressions were produced by the point and click menus of the software. In addition to the default Spss features, an add-on feature called PROCESS is used for analysing indirect relationships. PROCESS is created by a Andrew Hayes, Professor of Quantitative Psychology at The Ohio State University. PROCESS is uses ordinary least squares or logistic regression based path analytic framework for estimating direct and indirect effects in simple and multiple mediator models, interactions in moderation models along with regions of significance. PROCESS also uses bootstrap confidence intervals for the inference of about the indirect effects (Hayes, 2013). In this study, for the fifth and sixth hypothesis, PROCESS model number four is used for the mediation effect. For the seventh and eighth hypotheses, model number one is used for the moderated effect.

The PROCESS add on for SPSS is important because it goes beyond the casual steps approach and Sobel test. PROCESS method claims superiority to those methods with the support of heavy criticism (Hayes, 2009). It is beyond the scope of this study to discuss the methodological background of those criticism.

5.2. Preliminary Analyses

Prior to the administration of questionnaires as snowball and before the start of the data collection process, a small pilot study is administered to a random sample of commuters. Primary objective of this approach was testing the identical nature of the electronic survey to the pen and paper version. No negative feedback on the readability and comprehensive characteristics of the survey were reported

by the pilot study participants. Results from the pilot sample encouraged us to continue using the originally designed survey.

After the end of the data collection process, prior to analyse the data any further, we tried to inspect if there is any response different from the rest of the data. In order to label any outlier, the method proposed by Hoaglin and Iglewicz (1987) resulted there are no outliers among the responses in the study.

Normal Q - Q plots generated by SPSS package were used to inspect the deviations from the assumption of normality. Observed values and normal distribution were found to have overlapping patterns, which would signal the normal distribution for our sample.

Heteroscedasticity or homoscedasticity was observed using the plot of standardized residuals against standardized predicted values created in SPSS. Independent errors were displayed with a random pattern of dots and this observation of the plot showed that the assumption of homoscedasticity has been met.

The sample size employed in this study is checked whether it is suitable for basic regression and PROCESS macro created by Hayes (2013) which will be explained in the section 6.3 under "Analysis of Relationships". Resampling or sampling with replacement is a strong suit for smaller samples and these sampling method is called bootstrapping and it is important to note that PROCESS add on also uses bootstrapping method and possible drawbacks of smaller sample sizes are eliminated. According to Hair, Black, Babin, & Anderson (2010), the sample size is adequate for detecting low R^2 values for .05 significance levels and it falls into the desired level of observation range for the given number of independent variables in the study. According to the same source, almost any relationship will be statistically significant with the employment of large sample sizes.

6. EMPIRICAL RESULTS

6.1. Properties Of The Sample

A total of 210 actively working individuals responded to the study. The majority of the participants were male, with a distribution of 166 males and 44 females (79 % males, 21 % females).

Participants were asked about their age and about half of them were under age 30 (55,2 %) and people under 50 comprised of 99.5% of all participants.

Table 6.1 - Frequency of age groups.

		Frequency	Percent
Age	18 -30	116	55,2
	31 - 50	89	42,4
	51- 60	4	1,9
	61 and above	1	,5
	Total	210	100,0

49 % of the sample were single, 18.1 % of the participants were married with a non working spouse and 32.9% of the participants had a working spouse.

Table 6.2 - Marital Status and Spouses.

		Frequency	Percent
Marital Status and Spouses	Single	103	49,0
	Married, spouse is unemployed	38	18,1
	Married, spouse is working	69	32,9
	Total	210	100,0

77.1 % of the respondents were working in day shifts, commonly organized as from 8.00 am to 5.00 pm with slight variations. Next frequent form of work was variable shifts, that is 9 %, which is highly common for manufacturing industries. Very few people work part-time, work on call or work in unconventional shifts.

Table 6.3 - Working Schedule of Participants.

		Frequency	Percent
Working Schedule	Day Shifts	162	77,1
	Variable Shifts	19	9,0
	Work from home or field work	5	2,4
	Part time work, work on call, consulting, maintenance etc.	6	2,9
	Work with unconventional shifts without a pattern	18	8,6
	Total	210	100,0

Our sample consists of highly educated people with a moderate degree of tenure. 21 people (10 %) had a high school education or lower, 132 people had at least a college degree (62.9 %) and 57 people had (27.1 %) post graduate degrees or higher.

Table 6.4 - Education Level of the Participants.

		Frequency	Percent
Education	Up to High School	21	10,0
	At least vocational school, college and or bachelor degree	132	62,9
	Post Graduate and Phd	57	27,1
	Total	210	100,0

Years spent in the current organization are as shown in the figure. Only 13 % of the sample worked less than one year within the same organization, 32 % of the sample worked in the current organization more than five years, the majority of the sample worked one to five years in the current organizations (54.8%).

Table 6.5 - Tenure of the participants in the current organization.

		Frequency	Percent
Tenure in the current organization	Less than a year	28	13,3
	1 - 5 years	115	54,8
	6 - 10 years	39	18,6
	11 - 15 years	14	6,7
	16 - 20 years	9	4,3
	More than 20 years	5	2,4
	Total	210	100,0

Tenure of the participants, their total years worked is also asked. Very few people have tenure less than one year (3.8 %) and more than 20 years (6.7 %). The majority of the sample has a tenure between 1 to 10 years. The average tenure of the participants was 3 years.

Table 6.6 - Tenure of the participants in entire working life.

		Frequency	Percent
Tenure, years worked in total	Less than a year	8	3,8
	1 - 5 years	67	31,9
	6 - 10 years	69	32,9
	11 - 15 years	29	13,8
	16 - 20 years	23	11,0
	More than 20 years	14	6,7
	Total	210	100,0

6.2. Measurement Properties

Factor analysis was performed to demonstrate validity of the job satisfaction scale. With a Kaiser-Meyer-Olkin score of 0,825 and a significant Barlett’s Test of Sphericity ($p < 0.05$) it can be stated that our sample is adequate for factor analysis and the analysis can be labeled as appropriate.

Using eigenvalues of at least 1 or more, factor analysis yielded 4 values above 1, providing four components. Those four components explain a total of 62.4 % of the total variance.

As can be seen in the pattern matrix, the four component structure is consistent with the projections of scale creators and intended dimensions of job satisfaction by the author. Extracted components are “satisfaction with pay, promotion, nature of work and supervision”, each of the mentioned dimensions average out above 0.7 except promotion component being slightly below that value.

Table 6.7 - Component matrix for job satisfaction items.

Item	Component			
	Supervision	Nature of Work	Pay	Promotion
I feel I am being paid a fair amount for the work I do.			,708	
Raises are too few and far between (R.)			,818	
I feel unappreciated by the organization when I think about what they pay me (R.)			,662	
I feel satisfied with my chances for salary increases.			,762	
There is really too little chance for promotion on my job (R.)				,814
Those who do well on the job stand a fair chance of being promoted.				,536
People get ahead as fast here as they do in other places.				,731
I am satisfied with my chances for promotion.				,675
My supervisor is quite competent in doing his/her job.	,853			
My supervisor is unfair to me (R.)	,689			
My supervisor shows too little interest in the feelings of subordinates (R.)	,658			
I like my supervisor.	,772			
I sometimes feel my job is meaningless.		,772		
I like doing the things I do at work.		,777		
I feel a sense of pride in doing my job.		,735		
My job is enjoyable.		,740		

According to reliability analysis of job satisfaction scale with four components, a Cronbach’s Alpha value of 0.87 suggests very good internal consistency of the scale with the sample used. This reliability score is also consistent with various uses of the scale by other research.

A principal component analysis is performed on the withdrawal items with varimax rotation method. The Kaiser-Meyer-Olkin measure verified the sampling

adequacy for the factor analysis at KMO: 0,759 and also Barlett's Test of Sphericity reached statistical significance.

Only one component was extracted, explaining a variance of 50.88 %, which is consistent with the original measure.

A reliability analysis of the scale yielded a Cronbach's Alpha value of $\alpha=0.756$ indicating a good internal consistency of the measurement items for this study.

6.3. Analysis Of Relationships

Table 6.8 - Regression Results

Independent Variable	Dependent Variable											
	Withdrawal						Job Satisfaction					
	B constant	B	Beta	R Square	p	F	B constant	B	Beta	R Square	p	F
Time Spent During the Commute	2,317	0,084	0,106	0,011	0,126	2,360	2,759	0,078	0,113	0,008	0,103	2,678
Monetary Cost	2,418	0,032	0,041	0,020	0,550	0,360	3,116	-0,110	-0,161	0,026	0,02*	5,565

* significant at 95%

Hypothesis 1: *Time spent during the commute is positively related to withdrawal behavior.*

To test our hypothesis about the positive relationship between the time spent during the commute and withdrawal behavior, we conducted a regression analysis. Regression analysis of the variables resulted a very small R^2 ($R^2 = 0,011$) with a p value of 0,126 above 0.05. Thus, our hypothesis is not supported with current p value at 95% confidence level. According to our data, our study could not generate enough statistical power to point out a relationship between time spent during the commute and withdrawal behavior.

Hypothesis 2: *Monetary costs of commuting are positively related to withdrawal behavior.*

A regression analysis between commuting cost and withdrawal behavior resulted in a small R^2 value ($R^2 = 0,002$) and a p value of 0,550. Due to the small R^2 value and a non-significant p value, study could not support *Hypothesis 2* at 95 %

confidence level. According to our data, there is not enough statistical significance to propose that the money spent on commuting can predict withdrawal behavior.

Hypothesis 3: *Time spent during the commute is negatively related to job satisfaction.*

Regression analysis between time spent during the commute and job satisfaction resulted in a R^2 value of ,13 and is non-significant at 95 % confidence level ($p=0,103$). Thus Hypothesis 3 is not supported.

Hypothesis 4: *Monetary costs of commuting are negatively related to job satisfaction.*

The hypothesized relationship between the monetary cost of commuting and job satisfaction is significant at 95 % confidence level ($p=0,019$) and have a R^2 value of 0,026. The hypothesized negative relationship is confirmed in this analysis with the negative value of β . According to the regression analysis, monetary costs of commuting can predict job satisfaction, as more money spent on commuting will decrease the level of job satisfaction. Thus *Hypothesis 4* is supported.

Hypothesis 5: *Job satisfaction mediates the relationship between the time spent during the commute and withdrawal behavior.*

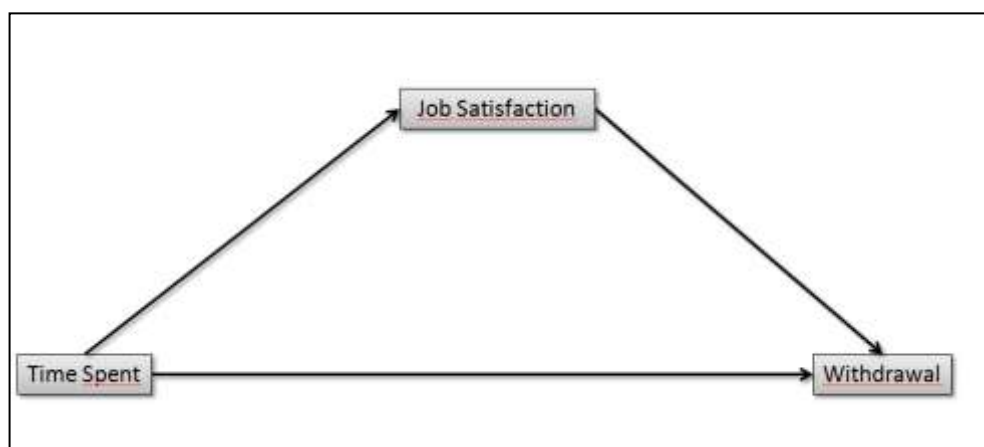


Figure 6.1 – Hypothesis 5.

In order to test the hypothesized mediation effect for the *Hypothesis 5*, we applied conditional process analysis by using the PROCESS macro for SPSS created by (Hayes, 2013).

Table 6.9 - Total, direct and indirect effects of time spent during the commute on withdrawal behavior (via job satisfaction).

Total effect of X on Y					
Effect	SE	t	p	LLCI	ULCI
,0835	,0544	1,536	,126	-,0237	,1907
Direct effect of X on Y					
Effect	SE	t	p	LLCI	ULCI
,1085	,0526	2,0624	,0404	,0048	,2123
Indirect effect of X on Y					
	Effect	Boot SE	BootLLCI	BootULCI	
satisfac	-,0250	,0152	-,0629	-,0018	

The analysis resulted in a significant negative indirect effect of satisfaction on withdrawal behavior with a bias corrected bootstrap confidence interval (10000 bootstrap samples) resulted all values below zero (LLCI:-0629, ULCI:-0,018) thus confirming there is an indirect negative effect through time spent on commuting. The results demonstrate support for the *Hypothesis 5*.

Hypothesis 6: *Job satisfaction mediates the relationship between the monetary cost of commuting and withdrawal behavior.*

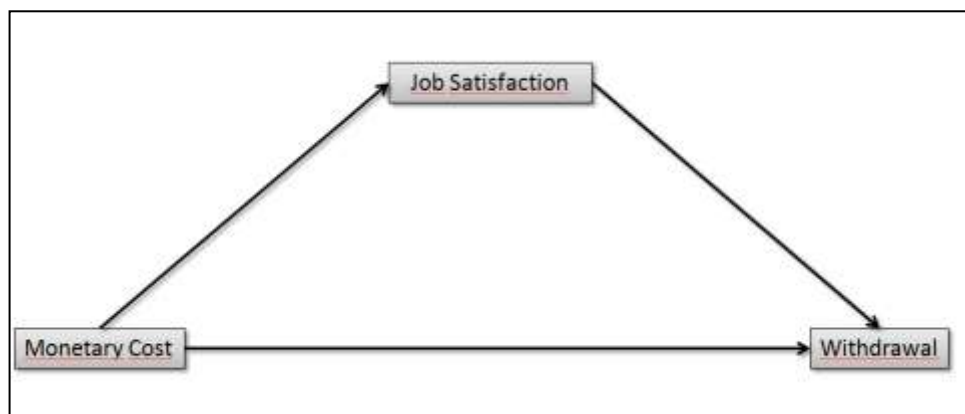


Figure 6.2 - Hypothesis 6

The effect of monetary cost of commuting on withdrawal behavior is found to be significantly mediated by job satisfaction. At the 95 % confidence level, although the indirect effect is lower and lower level bootstrap confidence interval is close to zero, with a significant p value and above zero LLCI-ULCI values (LLCI:0.0044 – ULCI:0.1795) of 10000 bootstrap samples, statistically there is enough evidence for *Hypothesis 6* to be accepted.

Table 6.10- Total, direct and indirect effects of the money spent on commuting on withdrawal (via job satisfaction)

Total effect of X on Y					
Effect	SE	t	p	LLCI	ULCI
,0116	,1250	,0931	,9259	-,2347	,2580
Direct effect of X on Y					
Effect	SE	t	p	LLCI	ULCI
-,0575	,1219	-,4717	,6376	-,2979	,1829
Indirect effect of X on Y					
	Effect	Boot SE	BootLLCI	BootULCI	
satisfaction	,0691	,0437	,0044	,1795	

Hypothesis 7: *Job satisfaction moderates the relationship between the time spent during the commute and withdrawal behavior.*

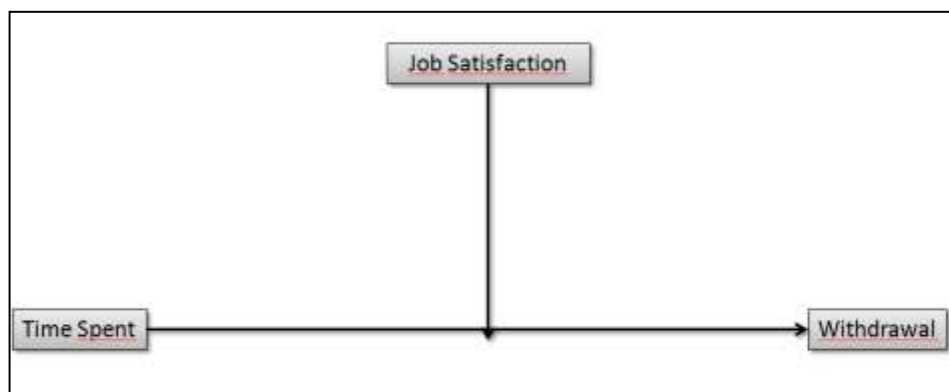


Figure 6.3 - Hypothesis 7.

Analyses to detect the hypothesized moderating effect of job satisfaction yielded non significant results at the 95 % confidence level with 10000 bootstrap samples (LLCI: -0,413 – ULCI: 0,4267). There is not enough evidence to claim there is a significant moderating effect of job satisfaction on the relationship of time spent

during the commute on withdrawal. According to the analysis for the interaction effect, *Hypothesis 7* is not supported.

Table 6.11 - Interaction of time spent during the commute and satisfaction.

	coeff	se	t	p	LLCI	ULCI
constant	3,167	0,786	4,028	0,000	1,617	4,717
satisfaction	-0,326	0,257	-1,271	0,205	-0,833	0,180
moneyspent	0,195	0,663	0,294	0,769	-1,112	1,502
interaction	0,007	0,213	0,032	0,975	-0,413	0,427

interaction: timespentxsatisfaction

Hypothesis 8: Job satisfaction moderates the relationship between the monetary cost of commuting and withdrawal behavior.

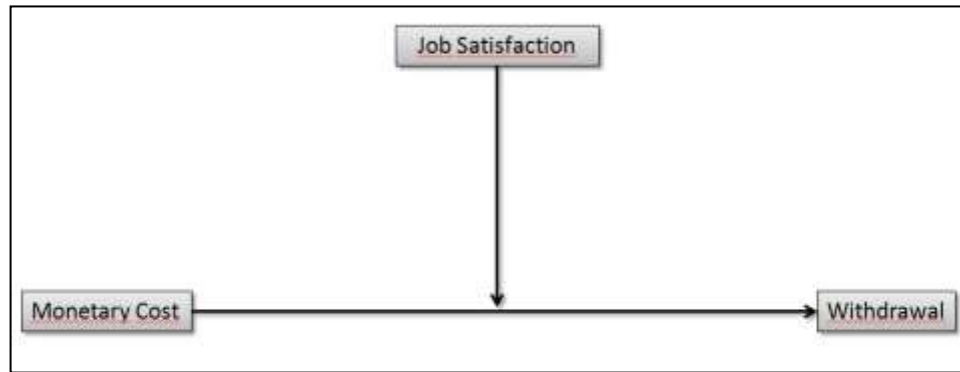


Figure 6.4 - Hypothesis 8.

As a result of the test for moderation with 10000 bootstrap samples, no significant relationship is detected between the cost of commuting and withdrawal with the interaction of job satisfaction. Test concluded insufficient statistical power to claim a moderating effect of job satisfaction on the relationship between monetary costs of commuting and withdrawal (LLCI: -0,2758 – ULCI: 0,423). Thus, there is no support for *Hypothesis 8* to be accepted.

Table 6.12 - Interaction of money spent during the commute and job satisfaction.

	coeff	se	t	p	LLCI	ULCI
constant	3,671	0,688	5,335	0,000	2,315	5,028
satisfaction	-0,387	0,232	-1,666	0,097	-0,845	0,071
moneyspent	-0,235	0,497	-,4723	0,637	-1,216	0,746
interaction	0,063	0,172	0,368	0,713	-0,276	0,402

interaction: moneyspentxsatisfaction

7. DISCUSSION

This study attempted to find the effects of the commuting routine of employees on satisfaction and withdrawal behavior. According to the previous relevant literature and daily life experiences, commuting is almost always a nerve racking routine one has to complete. In scientific sense, it is also placed in the heart of city planning, transportation and housing fields and there is relatively less attention to it from an organizational behavior perspective than other work related issues.

In order to study the effects of commuting, this study employed withdrawal behavior and job (dis)satisfaction as an outcome of a good or bad commute, as commuting is hypothesized to be positively related to job satisfaction and withdrawal behavior. In order to utilize commuting, we used the time spent during the commute and money spent for commuting relative to income as a self report measure.

In sum, this study could not generate enough statistical power to point out a relationship between the time spent during the commute and withdrawal behavior, between the money spent during the commute and withdrawal behavior, between time spent during the commute and job satisfaction. Along with the unsupported direct relationships, the interaction of job satisfaction both on the relationship between the time spent during the commute and withdrawal, and the money spent during the commute and withdrawal behavior are not supported. On the other hand our results concluded that monetary costs of commuting reduces job satisfaction, job satisfaction mediates the relationship between the time spent during the commute and withdrawal behavior. Finally job satisfaction also mediates the relationship between monetary costs of commuting and withdrawal behavior.

Results indicate statistically there is a non significant relationship between time spent commuting and withdrawal behavior. The hypothesized relationship was positive, but the sample failed to generate enough statistical significance to support this claim. There might be a few reasons behind that non significant result. Time

spent during the commute, as previously stated, is an interaction of distance, the transport mode and infrastructure rather than a result of a conscious choice made by the commuter. It might be considered as given by employees and that does not interfere with their behaviors toward their job or work. Withdrawal also brings important consequences for people, especially with limited flexibility within their organizations either due to their fixed skills and current investments in their jobs and shortage of other employment opportunities in the market. This justification can be supported according to Muchinsky and Morrow (1980) as they state that negative attitudes could not be easily expressed during periods of high unemployment. One can infer from that unemployment and negative attitude relationship, people tend to resist to their longer commutes to avoid the undesirable unemployment in high unemployment periods. That explanation appeared valid in our sample given the nationwide unemployment levels are relatively higher among participants at the time of the study, at about overall 10 %, and especially for young people at 19 % according to Turkstat (2014). These figures are important on our results as relatively younger labor force constitutes the majority of the study.

Along with the time spent during the commute, money spent for commuting yielded non-significant results in predicting withdrawal in our analysis with the current sample. Similar underlying mechanisms can be used to justify this non significant relationship. Spending more money on commuting is a result of an expensive transportation, long distances and lack of other alternatives to implement. An expensive commute can easily be seen as an outcome of overall price levels and/or high costs rather than looking for a retaliation towards the work or the job. Expensive gas, high costs of public transportation, inevitable long distances due to the workplaces being away from residential neighborhoods and a tight labor market, can easily shift the focus away from the organization. As discussed previously, monetary expenditures are also inherent in the commuting and unavoidable after all.

Relationship between time spent during the commute and job satisfaction is also yielded non-significant results contrary to the hypothesized negative

relationship. This finding is parallel with the non-significant relationship between time spent commuting and withdrawal behavior. The waste of time is not considered as a part of the job itself, instead seen as a result of other factors like traffic congestion, inefficient city planning etc. and it is considered given in the work settings. Sonnentag and Frese (2013) provides examples of studies that has weak and non significant relationships with absenteeism, even negative relationships among stressors and absenteeism. Also a job stressor does not necessarily relate to withdrawal, a mediating mechanism through strain or common variance between the stressor and strain might cause the outcomes.

Analysis about the relationship between monetary cost of commuting on job satisfaction yielded statistically significant results. As hypothesized, there is a significant negative relationship between job satisfaction and the money spent on commuting. People experiencing high costs to get to work are found to experience job dissatisfaction.

Analysis of the hypothesized indirect relationship between withdrawal and time spent commuting via job satisfaction yielded a suppression effect. Suppression is also called an inconsistent mediation, indicating the direct effect and mediating effect are opposite to each other by having different signs (MacKinnon, Fairchild, & Fritz, 2007; MacKinnon, Krull, & Lockwood, 2000). Direct and indirect effects of commuting time, simultaneously cancel each other out in similar magnitude but opposite directions. This would indicate the increased withdrawal due to the increase in commuting time is outweighed by the decreases in withdrawal due to the level of satisfaction. Job satisfaction can be thought as a dominant and it is a well established predictor of withdrawal in comparison to the commuting time, thus cancels its effects and makes the indirect effect negative. Employees who spent too many of their valuable time for commuting will experience less withdrawal if they have high levels of satisfaction with their work. Even though their commute is long for them, they will be consent with the long commute and will resort to withdrawal less, keeping the redeeming features of the jobs in mind. It is reasonable to infer that people with a satisfying job can acquiesce long commutes. Alternatively there might be a reverse causation meaning that more satisfied people are more willing

to tolerate longer commutes. A longitudinal design would be more appropriate to study such an effect.

Another finding of this study is the indirect effect of the commuting costs on withdrawal through job satisfaction. Results indicate increased costs of commuting will lead to withdrawal for the people with higher levels of job satisfaction. Satisfied people can be seen in an equilibrium state and any incremental strain can be considered a threat to the status quo. As satisfaction with pay constitutes the greater portion of job satisfaction, decreases in the monetary income due to an increased costs on the commute will be affecting withdrawal behavior.

Moderating effect of job satisfaction is also tested both for time and money spent during the commute on withdrawal. There is no significant moderating effect has been found for our sample. The result is not surprising given the direct effects and relative difficulty in finding moderator effects in research (McClelland & Judd, 1993) (Aguinis, 1995) (Champoux & Peters, 1987).

It should also be considered that people actually can utilize their commute. Even further, according to Redmond and Mokhtarian (2001), Van Ommeren (1998), Lyons and Chatterjee (2008), Ory et al. (2004) people need an optimum commuting time rather than zero commuting and individuals are willing to travel longer than their actual commute. Consistent with that finding, commuting time is not always a waste of time, it can be something that the commuter wants just for travel purposes, to catch up with daily reading, to conduct phone calls or for things that they do not want to allocate their time otherwise. This is also supported by Ory et al. (2004) with the concept of "subjective mobility" explaining the individual differences in evaluating the commute. Individuals have different views about a bad a commute, according to their level of tolerance for stressors and their utilization of the commute or their experiences during the commute.

Physical or mental, any commute is an effort and expenditure of resources for the individual. As stated, it is not only time, but the way its allocated and individual differences that are important to interpret the outcomes. Van Hooff (2013) reports that psychological detachment from work during the commute is also important for

commuters. According to the utilization of the commute or the subjective experiences about the process, commute from work can be the time for individual to relax and unwind from work. It is a transition between work and home and helps people change their mood and provides a transmission between roles. Depending on the pleasantness of the commute, it can be considered a form of recovery. According to Gatersleben and Uzzell (2007), this might be the only part of the day when individuals have the chance to dedicate to themselves. Apart from all above explanations, residential choices might already be adjusted for commuting costs and commuting times.

Conditions that shape the working life can also be used to explain the results. As Berry, Leelchook, and Clark (2012) suggested in their study, organizational norms can be an important factor on the salience of withdrawal behaviors. There are many organizations which have strict measures against any form of counterproductive behavior, whereas some of them might appreciate more flexibility in their work structure. Among our sample, only 13.8 % of the participants reported unconventional work schedules, meaning a majority of the participants either work in day shifts or interchangeable shifts as white or blue collar employees. These forms of working often have minimum degree of flexibility, moreover those work sites are often subject to attendance controls, even surveillance to some degree.

The effect of job security on work behaviors are reported by Reisel, Probst, Chia, Maloles and König (2010). This can be regarded as an important antecedent of counterproductive behavior in various direct and indirect ways. Another study by Staufenbiel and König (2010) reports such results; arguing that challenge and hindrance effects of job insecurity as a stressor have simultaneous effects on withdrawal. Probst, Stewart, Gruys and Tierney (2007) also reported that high levels of job insecurity leads to fewer counterproductive behavior at work because it puts employees at jeopardy. As people are forced by economical factors to remain the organization, they may resort to other forms of manifestations of their dissatisfaction, rather than physical withdrawal

7.1. Limitations of the current study

There are several limitations to this study and the results should be considered under these limitations. One of those limitations is the chosen method for the measurement of commuting time and commuting cost. The amount of the time spent during the commute and monetary costs of the commute are measured by asking participants simply how much they spend on both. Since keeping time logs or calculating exact costs of commuting is not practical in the extent of this study, self report method is considered. Operationalization of withdrawal by using company reports or frequency or a combination of various methods can be employed as a superior method, instead of using a self report measure, however, in the context of this study it is neither practical nor economical given this study's resources and anonymity of the participants (Fox et al., 2001) as discussed previously.

As a consequence of the nature of the constructs measured, it is not easy to assume that all of the participants were thorough in projecting the current and actual situation in their self reports. Although the efforts to achieve unanimity and confidentiality for the participants, job dissatisfaction and withdrawal might be a victim of underreporting. According to (Berry, Carpenter, & Barratt, 2012) there are skeptical views on self reports when the self report is about counter-productivity. Regardless of the actual feelings of the individual, socially undesired behaviors are subject to socially desirable responses (Randall & Fernandes, 1991). This might be the case for our responses, meaning that underreporting and social desirability might impair our results thus weakening our hypothesized relationships.

Also the demographic structure of the study participants should be considered upon reading these results. The majority of the sample were relatively young, relatively new at the working life and not married. These people can show varying degrees of vulnerability to unemployment, to job insecurity and varying degrees of resistance to dissatisfaction, withdrawal and costs and burdens of commuting compared to the opposite side of the demographics.

7.2. Practical Implications and Directions for Further Research

Above all limitations and results of the study, this study is important as it brings the topic of commuting to the attention of management and organizational domains. Thus far, the majority of the studies about commuting have transportation, city planning or labor market focus and only few of them relates commuting with stress. The outcomes affected by the effort expenditure to go to work is still unclear. So we believe that it is important to label or name those in order to eradicate the sub-optimal settings the employers or organizations might have, beyond transportation or residential decisions.

This study has a few directions for future research on commuting in the organizational and managerial domain. Further studies should take concepts like stress and burnout into consideration upon investigating relationships that are affected by commuting. Job market and city structure is also important and should be taken into account before designing studies.

Commuting deserves more attention than it already has in management and organizational behavior domain. Studies of “burnout” as a result of a chronic long commute, or burnout as a mediator of a relationship as commuting is being a predictor will contribute to the well being of the workers. Commitment can be a mediator or a moderator of relationships between commuting and other organizational outcomes as it often defines the boundaries of resistance to stressors.

Job security and unemployment might be more important than this study already acknowledged, and those need special attention in the studies with any form of counterproductive behavior are chosen as outcome variables. High unemployment and tight job market curbs the tendency to withdraw from work and brings less flexibility to employers thus providing low correlations with other variables. Future studies should find ways to incorporate unemployment and job

market conditions into their analyses. Along with the unemployment, levels of job security should accompany the results for better interpretation.

Job commitment is also one of the major determinants of withdrawal, and should be investigated as an outcome of commuting. It might also play a mediating or moderating role between commuting and organizational outcomes. Job engagement is should also be considered as one of the concepts that makes a terrible commute tolerable.

The cross sectional design of this study due to its limitations, cannot be considered a strength concerning the ability to reveal the relationships which are time sensitive. A longitudinal design should be preferred over cross sectional design if possible. Reverse causality from job satisfaction to the tolerance of longer commutes rather than reduction in job satisfaction due to a long commute deserves attention and this can be possible with a longitudinal design. Also the longitudinal design is needed to understand both the initial impact of the stressors and the process of adaptation to the commuting and gradual aggravation of the stressor.

Along with job satisfaction, overall life satisfaction is also important as it is also affected by commuting factors. Social interactions, family life and work-life balance are the ones that might suffer the most from an unpleasant commute. Studies incorporating these relationships will be drawing a better picture of commuting in real life.

As previously mentioned, operationalization of withdrawal is an important issue for further research. Some forms of withdrawal are extremely salient and others might be almost invisible. For example, as discussed in the previous sections; lateness is rarely detectable and not usually documented by the organizations. It can only affect the jobs that require personal interaction and strict presence. On the other hand turnover is more salient and more destructive. Research on withdrawal can use separate measures for each withdrawal behavior if possible and test individual effects of each behavior has its own characteristics.

As defined by Koslowsky (2000), minor withdrawal behaviors are important to understand the reduced effort and reduced engagement in the workplace. Social loafing, shirking, free riding, having longer breaks than authorized and excessive socializing are among those minor withdrawal that researchers and practitioners should pay attention to, but social desirability bias is expected to be stronger in those minor behaviors.

Further research should also take social desirability into consideration both in designing the studies and discussing the results. Especially counterproductive behavior needs extra attention as it is being highly susceptible to social desirability bias. A delicate design to reveal the unbiased responses to prevent underreporting might be the key to increase the quality and interpretability of the results. Parallel with self reports of withdrawal, inclusion of company records or peer evaluations to the analysis can improve the design, but company records and peer evaluations are both sensitive to the researcher's resources and examining those records are highly labor intensive. Using company records and peer evaluations might also raise concerns about anonymity and confidentiality, thus further reducing the quality of the design.

Our results have some implications for practitioners in related fields and positions. In accordance with the previous literature, job dissatisfaction is found to effect withdrawal. This relationship deserves attention from the practitioners whom are trying to address issues in the withdrawal and counterproductivity domain in general. Employers should implement creative and progressive strategies against possible negative effects of commuting regardless of the current situation in order to avoid long term stressor effects and productivity concerns. Flexible working hours and compressed work weeks would help workers to allocate their relatively more productive time to work. Commuting related problems should be a mutual concern for both parties rather than being an individual problem of the commuter.

Some employers actually put efforts into reducing the burden of commuting for their employees. The majority of the blue collar workers commute with the company provided shuttles and this stands for an important fringe benefit on

workers' behalf. Further study should include such fringe benefits into the design and investigate the possible effects of these benefits to organizational outcomes.

Results also show that there is no reason for employers to put residential neighborhood limitation in the job advertisements. Employers sometimes concerned about the applicants' distance from the workplace and tend to discriminate the applicants whom they think they will have a difficult commute if they are recruited. This is generally considered as a form of discrimination (spatial discrimination) and called redlining and usually brings legal consequences if implemented on purpose, and it is also an ongoing debate as it creates economical layers in the cities and discourages particular groups of people (Zenou & Boccoard, 2000) (Zenou, 2002). Results from this study have no support for this view and a tendency to select better commuters will only limit the applicant pool and lead to a worse selection.

7.3. Conclusion

This study makes some contributions to the field. Overall, the results from this study is important as it demonstrates the effects of the time spent commuting and monetary costs of commuting are not enough to rely on upon explaining withdrawal behaviors. Time spent and monetary costs are seen as a part of working life and employee seems to have almost no discretion on the determinants. Monetary costs are highly dependent on the economic indicators and time spent during the commute is an outcome of infrastructure, leaving no room for the employee to adjust the behavior for a better outcome.

Commuting takes time and money, and do not use these resources in a productive way. Even though this study could not reveal direct associations with satisfaction and withdrawal, in natural flow of life commuting is considered one of the worst things to do in a day. A study done by Krueger et al.(2009) puts commuting among the most disliked activities. According to the study, even working itself or actual work is not as painful as going to work. With this

information given, there are more constructs out there to be associated with commuting in order to build an organizational literature around at this point.

It is important to note that commuters are all trapped with their commuting status. There are no better options for them to improve their commute or completely get rid of the commuting. The majority of the possible improvements are beyond the employers' discretion and reach, and the ones that the employees can adjust might need long term planning. Reducing the costs of the commute is almost always impossible, given the costs associated with the commute are often determined by external factors, leaving no room for employer to wiggle.

Avoiding a lengthy or costly commute is possible if an employer chooses to change residence or workplace. Either one is a major life changing event, requires many planning and takes time to implement and have long periods of transition. Thus, it can only work well in the long term, but the effects of a lengthy commute are immediate and visible in daily life. An individual suffering from a long commute, if planning to switch jobs, will probably face with more dramatic situations as a job seeker, especially in job markets with higher unemployment levels. Even in the markets with lower unemployment rates and, fixed investments of an employer towards his or her job will be an important factor upon deciding to switch jobs or stay.

REFERENCES

- Aguinis, H. (1995). Statistical power with moderated multiple regression in management research. *Journal of Management*, 21(6), 1141-1158. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.2044-8325.1987.tb00257.x/full>
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211. doi:10.1016/0749-5978(91)90020-T
- Aldag, R. J., & Kuzuhara, L. W. (2002). *Organizational Behavior and Management*. Cincinnati, OH: South-Western Thomson Learning.
- Barling, J., Kelloway, E. K., & Iverson, R. D. (2003). High-quality work, job satisfaction, and occupational injuries. *Journal of Applied Psychology*, 88(2), 276–283. doi:10.1037/0021-9010.88.2.276
- Bawa, M. A., & Jantan, M. (2005). Human Resource Practices As Determinants Of Employee Turnover : An Empirical Investigation. *Asian Academy of Management Journal*, 10(2), 69–80.
- Ben-David, N., & Sharabi, M. (2009). Commuting and Its Effect on Work Decisions. *International Journal of Economic Perspectives*, 3(3), 183–187.
- Bernardin, H. J. (1977). The Relationship Of Personality Variables To Organizational Withdrawal. *Personnel Psychology*, 30, 17–27.
- Berry, C. M., Carpenter, N. C., & Barratt, C. L. (2012). Do other-reports of counterproductive work behavior provide an incremental contribution over self-reports? A meta-analytic comparison. *The Journal of Applied Psychology*, 97(3), 613–36. doi:10.1037/a0026739
- Berry, C. M., Leelchook, A. M., & Clark, M. A. (2012). A meta analysis of the interrelationships between employee lateness, absenteeism, and turnover: Implications for models of withdrawal behavior. *Journal of Organizational Behavior*, 33(2012), 678–699. doi:10.1002/job
- Blau, G. (1995). Influence of Group Lateness on Individual Lateness: a Cross-Level Examination. *Academy of Management Journal*, 38(5), 1483–1496. doi:10.2307/256867
- Blau, G. (1998). On the aggregation of individual withdrawal behaviors into larger multi-item constructs. *Journal of Organizational Behavior*, 19, 437–452.
- Brooke, P. P. (1986). Beyond the Steers and Rhodes model of employee attendance. *Academy of Management Review*, 11(2), 345–61. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10276563>

Champoux, J., & Peters, W. (1987). Form, effect size and power in moderated regression analysis. *Journal of Occupational Psychology*, (60), 243–255. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.2044-8325.1987.tb00257.x/full>

Chiu, C. (1998). Do professional women have lower job satisfaction than professional men? Lawyers as a case study. *Sex Roles*, 38, 521–537. Retrieved from <http://link.springer.com/article/10.1023/A:1018722208646>

Clark, A., Oswald, A., & Warr, P. (1996). Is job satisfaction U-shaped in age? *Journal of Occupational and Organizational Psychology*, 69(1), 57–81. doi:10.1111/j.2044-8325.1996.tb00600.x

Clark, K., Peters, S., & Tomlinson, M. (2005). The determinants of lateness: evidence from British workers. *Scottish Journal of Political Economy*, 52(2) (January), 282–304. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.0036-9292.2005.00345.x/full>

Clark, W. A. V, Huang, Y., & Withers, S. (2003). Does commuting distance matter? Commuting tolerance and residential change. *Regional Science and Urban Economics*, 33, 199–221. doi:10.1016/S0166-0462(02)00012-1

Cohen, S. I. (2006). Helping employees get to work. *The Wall Street Journal Market Watch*.

Costa, G., Pickup, L., & DiMartino, Vittorio. (1988). Commuting—a further stress factor for working people: evidence from the European Community. *International Archives of Occupational and Environmental Health*, 60, 377–385. Retrieved from <http://link.springer.com/article/10.1007/BF00405674>

Employment, Unemployment and Wages. (2014). *Turkish Statistics Institute*. Retrieved March 1, 2014, from <http://www.turkstat.gov.tr/UstMenu.do?metod=temelist>

Fields, D., & Blum, T. (1997). Employee satisfaction in work groups with different gender composition. *Journal of Organizational Behavior*, 18(2), 181–196.

Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive Work Behavior (CWB) in Response to Job Stressors and Organizational Justice: Some Mediator and Moderator Tests for Autonomy and Emotions. *Journal of Vocational Behavior*, 59(3), 291–309. doi:10.1006/jvbe.2001.1803

Garrison, K. R., & Muchinsky, P. M. (1977). Evaluating the Concept of Absentee-Proneness With Two Measures of Absence. *Personnel Psychology*, 30(3), 389–393. doi:10.1111/j.1744-6570.1977.tb00431.x

Gatersleben, B., & Uzzell, D. (2007). Affective Appraisals of the Daily Commute: Comparing Perceptions of Drivers, Cyclists, Walkers, and Users of Public Transport. *Environment and Behavior*, 39(3), 416–431. doi:10.1177/0013916506294032

Gibson, J., & Klein, S. (1970). Employee attitudes as a function of age and length of service: A reconceptualization. *Academy of Management Journal*, 13(4), 411–426. Retrieved from <http://amj.aom.org/content/13/4/411.short>

Gottholmseder, G., Nowotny, K., Pruckner, G. J., & Theurl, E. (2009). Stress perception and commuting. *Health Economics*, 18, 559–576. doi:10.1002/hec

Gruys, M. L., & Sackett, P. R. (2003). Investigating the Dimensionality of Counterproductive Work Behavior. *International Journal of Selection and Assessment*, 11(1), 30–42. doi:10.1111/1468-2389.00224

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (Seventh Ed.) Upper Saddle River, NJ. Pearson Education.

Hanisch, K. A., & Hulin, C. L. (1991). General attitudes and organizational withdrawal: An evaluation of a causal model. *Journal of Vocational Behavior*, 39(1), 110–128. doi:10.1016/0001-8791(91)90006-8

Hanisch, K., & Hulin, C. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal behaviors. *Journal of Vocational Behavior*, 37(1), 60–78. Retrieved from <http://www.sciencedirect.com/science/article/pii/0001879190900070>

Harrison, D. a., & Martocchio, J. J. (1998). Time for Absenteeism: A 20-Year Review of Origins, Offshoots, and Outcomes. *Journal of Management*, 24(3), 305–350. doi:10.1177/014920639802400303

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium. *Communication Monographs*, 76(4), 408–420. doi:10.1080/03637750903310360

Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach*. New York: Guilford Press.

Hoaglin, D. C., and Iglewicz, B. (1987). Fine tuning some resistant rules for outlier labeling. *Journal of American Statistical Association*, 82, 1147–1149.

Jamal, M., & Mitchell, V. (1980). Work, nonwork, and mental health: A model and a test. *Industrial Relations*, 19(1). Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1468-232X.1980.tb00156.x/abstract>

Johns, G. (1996). *Organizational Behavior: Understanding and Managing Life at Work* (Fourth Edi.). New York, NY.: Harper Collins College.

Johns, G. (2004). The Psychology of Lateness, Absenteeism, and Turnover. In C. Anderson, N., Ones, D. S., Sinangil, H. K., & Viswesvaran (Ed.), *Handbook of Industrial, Work and Organizational Psychology vol.2* (Vol. c). London: Sage.

Judge, T. a., & Ilies, R. (2004). Affect and job satisfaction: a study of their relationship at work and at home. *The Journal of Applied Psychology*, 89(4), 661–73. doi:10.1037/0021-9010.89.4.661

Judge, T. a., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology*, 87(3), 530–541. doi:10.1037//0021-9010.87.3.530

S.W.J. Kozlowski (Ed.) *The Oxford Handbook of Industrial and Organizational Psychology*, New York: oxford University Press. (Judge, T. A., & Hulin, C. L. (2009). Job Satisfaction and Job Affect.)

Judge, T. A., & Martocchio, J. J. (1997). Five-factor model of personality and employee absence. *Journal of Applied Psychology*, 82(5), 745–755. Retrieved from <http://www.timothy-judge.com/Judge, Martocchio, %26 Thoresen JAP 1997.pdf>

Judge, T. A., Parker, S. K., Colbert, A. E., Heller, D., & Ilies, R. (n.d.). Job Satisfaction: A Cross-Cultural Review. In C. Anderson, N., Ones, D. S., Sinangil, H. K., & Viswesvaran (Ed.), *Handbook of Industrial, Work and Organizational Psychology vol.2*.

Judge, T., Piccolo, R. F., Podsakoff, N. P., Shaw, J. C., & Rich, B. L. (2010). The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behavior*, 77(2), 157–167. doi:10.1016/j.jvb.2010.04.002

Judge, T., & Bono, J. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86(1). Retrieved from <http://doi.apa.org/psycinfo/2001-16970-007>

Judge, T., Bono, J., & Locke, E. (2000). Personality and job satisfaction: the mediating role of job characteristics. *Journal of Applied Psychology*, 85(2), 237–249. doi:10.1037//0021-9010.85

Judge, T., & Watanabe, S. (1994). Individual differences in the nature of the relationship between job and life satisfaction. *Journal of Occupational and Organizational Psychology*, 67, 101–107. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.2044-8325.1994.tb00554.x/abstract>

Kahneman, D., & Krueger, A. B. (2006). Developments in the Measurement of Subjective Well-Being. *Journal of Economic Perspectives*. 20(1), 3-24. doi:10.1257/089533006776526030

Kahneman, D., Krueger, A. B., Schkade, D. a, Schwarz, N., & Stone, A. a. (2004). A survey method for characterizing daily life experience: the day reconstruction method. *Science*, 306, 1776–1780. doi:10.1126/science.1103572

- Kluger, A. (1998). Commute variability and strain. *Journal of Organizational Behavior*, 19, 147–165. doi:10.2307/3100192
- Koslowsky, M. (1997). Commuting Stress: Problems of Definition and Variable Identification. *Applied Psychology*, 46(2), 153–174. doi:10.1080/026999497378412
- Koslowsky, M. (2000). A new perspective on employee lateness. *Applied Psychology*, 49(3), 390–407.
- Koslowsky, M., Aizer, A., & Krausz, M. (1996). Stressor and Personal Variables in the Commuting Experience. *International Journal of Manpower* 17 (3)), 4 – 14.
- Krueger, A. B., Kahneman, D., Schkade, D., Schwarz, N., & Stone, A. A. (2009). National time accounting: The currency of life. In *Measuring the Subjective Well-Being of Nations: National Accounts of Time Use and Well Being* (Vol. I, pp. 1–84). doi:10.1177/0959680108094135
- Laczo, R., & Hanisch, K. (2000). An examination of behavioral families of organizational withdrawal in volunteer workers and paid employees. *Human Resource Management Review*, 9(4), 453–477. Retrieved from <http://www.sciencedirect.com/science/article/pii/S1053482299000297>
- Landy, F. J., & Conte, J. M. (2010). *Work in the 21st Century* (3rd ed.). Hoboken, NJ: Wiley.
- LePine, J. a., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87(1), 52–65. doi:10.1037//0021-9010.87.1.52
- Locke, E. (1976). The Nature and Causes of Job Satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1343). Chicago, IL: Rand McNally.
- Lucas, J. L., & Heady, R. B. (2002). Flextime commuters and their driver stress, feelings of time urgency, and commute satisfaction. *Journal of Business and Psychology*, 16(4), 565–571. doi:10.1023/A:1015402302281
- Lund, D. B. (2003). Organizational culture and job satisfaction. *Journal of Business & Industrial Marketing*, 18(3), 219–236. doi:10.1108/0885862031047313
- Lyons, G., & Chatterjee, K. (2008). A Human Perspective on the Daily Commute : Costs , Benefits and Trade-offs. *Transport Reviews*, 28(2), 37–41. doi:10.1080/01441640701559484
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation Analysis. *Annual Review of Psychology*, 58(1), 593–614. doi:10.1146/annurev.psych.58.110405.085542

- MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. *Prevention Science: The Official Journal of the Society for Prevention Research*, 1(4), 173–81.
- Martocchio, J. J., & Harrison, D. A. (1993). To be there or not to be there? Questions, theories, and methods in absence research. *Research in Personnel and Human Resources Management*, 11 (259-328).
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, 114(2), 376–90. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/8416037>
- Muchinsky, P., & Morrow, P. (1980). A multidisciplinary model of voluntary employee turnover. *Journal of Vocational Behavior*, 17, 263–290. Retrieved from <http://www.sciencedirect.com/science/article/pii/0001879180900226>
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2011). *Fundamentals of Human Resource Management, 4th edition*. New York: McGrawHill-Irwin.
- Novaco, R. W., Stokols, D., & Milanese, L. (1990). Objective and subjective dimensions of travel impedance as determinants of commuting stress. *American Journal of Community Psychology*, 18(30), 231–257. doi:10.1007/BF00931303
- Ommeren, J. Van. (1998). On-the-job search behavior: the importance of commuting time. *Land Economics*, 74(4), 526–540. Retrieved from <http://www.jstor.org/stable/3146883>
- Ones, D. S., Viswesvaran, C., & Schmidt, F. L. (2003). Personality and absenteeism: a meta-analysis of integrity tests. *European Journal of Personality*, 17(S1), S19–S38. doi:10.1002/per.487
- Ory, D. T., Mokhtarian, P. L., Redmond, L. S., Salomon, I., Collantes, G. O., & Choo, S. (2004). When is Commuting Desirable to the Individual? *Growth and Change*, 35(3), 334–359. doi:10.1111/j.1468-2257.2004.00252.x
- Oshagbemi, T. (2003). Personal correlates of job satisfaction: empirical evidence from UK universities. *International Journal of Social Economics*, 30(12), 1210–1232. doi:10.1108/03068290310500634
- Plummer, B. (2013). Commuting in the U.S. is hellish — but at least it's not getting worse. *The Washington Post*.
- Probst, T. M., Stewart, S. M., Gruys, M. L., & Tierney, B. W. (2007). Productivity, counterproductivity and creativity: The ups and downs of job insecurity. *Journal of Occupational and Organizational Psychology*, 80(3), 479–497. doi:10.1348/096317906X159103

Puigarnau, E. G. (2011). *Labour markets , commuting and company cars*. Dissertation. Tinbergen Institute, Amsterdam.

Randall, D. M., & Fernandes, M. F. (1991). The social desirability response bias in ethics research. *Journal of Business Ethics*, 10(11), 805–817. doi:10.1007/BF00383696

Redmond, L. S., & Mokhtarian, P. L. (2001). The positive utility of the commute : modeling ideal commute time and relative desired commute amount, *Transportation*, 28, 179–205.

Reisel, W. D., Probst, T. M., Chia, S.-L., Maloles, C. M., & König, C. J. (2010). The Effects of Job Insecurity on Job Satisfaction, Organizational Citizenship Behavior, Deviant Behavior, and Negative Emotions of Employees. *International Studies of Management and Organization*, 40(1), 74–91. doi:10.2753/IMO0020-8825400105

Road Wage Survey. (2011). Retrieved from <http://www.kronos.com/pr/road-wage-survey.aspx>.

Robbins, S. P., & Judge, T. A. (2010). *Essentials of organizational behavior* (10th ed.). Upper Saddle River, NJ.: Pearson Prentice Hall.

Rouwendal & Nijkamp. (2004). Living in Two Worlds : A Review of Home-to-Work Decisions. *Growth and Change*, 35(3), 287–303.

Rouwendal, J. (1999). Spatial job search and commuting distances. *Regional Science and Urban Economics*, 29(4), 491–517. doi:10.1016/S0166-0462(99)00002-2

Sonnentag, S., & Frese, M. (2013). Stress in Organizations. In Irwin. B. Weiner. *Handbook of Psychology* 2nd Edition.(pp. 560–592), John Wiley and Sons.

Spector, P. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology*, 13(6).

Spector, P., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68(3), 446–460. doi:10.1016/j.jvb.2005.10.005

Staufenbiel, T., & König, C. J. (2010). A model for the effects of job insecurity on performance, turnover intention, and absenteeism. *Journal of Occupational and Organizational Psychology*, 83(1), 101–117. doi:10.1348/096317908X401912

Staw, B. (1980). The consequences of turnover. *Journal of Occupational Behaviour*, 1(253–273)

Stutzer, A., & Frey, B. S. (2007). Commuting and Life Satisfaction in Germany. *Informationen Zur Raumentwicklung*, 2, 1–11. Retrieved from

http://www.stadtbauenstadtleben.de/nn_21272/BBSR/EN/Publications/lzR/2007/2__3StutzerFrey,templateId=raw,property=publicationFile.pdf/2_3StutzerFrey.pdf

Stutzer, A., & Frey, B. S. (2008). Stress that Doesn't Pay: The Commuting Paradox*. *Scandinavian Journal of Economics*, 110(2), 339–366. doi:10.1111/j.1467-9442.2008.00542.x

Van den Berg, G. J., & Gorter, C. (1997). Job Search and Commuting Time. *Journal of Business & Economic Statistics*, 15(2), 269. doi:10.2307/1392310

Van Hooff, M. L. M. (2013). The Daily Commute from Work to Home: Examining Employees' Experiences in Relation to Their Recovery Status. *Stress and Health*. doi:10.1002/smi.2534

Van Ommeren, J., & Fosgerau, M. (2009). Workers' marginal costs of commuting. *Journal of Urban Economics*, 65(1), 38–47. doi:10.1016/j.jue.2008.08.001

Van Ommeren, J. N., & Gutiérrez-i-Puigarnau, E. (2011). Are workers with a long commute less productive? An empirical analysis of absenteeism. *Regional Science and Urban Economics*, 41(1), 1–8. doi:10.1016/j.regsciurbeco.2010.07.005

Wener, R. E., & Evans, G. W. (2011). Comparing stress of car and train commuters. *Transportation Research Part F: Traffic Psychology and Behaviour*, 14(2), 111–116. doi:10.1016/j.trf.2010.11.008

Zenou, Y. (2002). How do firms redline workers? *Journal of Urban Economics*, 52(3), 391–408. doi:10.1016/S0094-1190(02)00526-0

Zenou, Y., & Boccoard, N. (2000). Racial Discrimination and Redlining in Cities. *Journal of Urban Economics*, 48(2), 260–285. doi:10.1006/juec.1999.2166

RESUME

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