



January 2018

The Effects Of Overnight Work Travel On Working Mothers And Fathers

Natalie Martinson

Follow this and additional works at: <https://commons.und.edu/theses>

Recommended Citation

Martinson, Natalie, "The Effects Of Overnight Work Travel On Working Mothers And Fathers" (2018). *Theses and Dissertations*. 2280.
<https://commons.und.edu/theses/2280>

This Thesis is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact zeinebyousif@library.und.edu.

THE EFFECTS OF OVERNIGHT WORK TRAVEL ON WORKING MOTHERS AND
FATHERS

by

Natalie Marie Martinson
Bachelor of Science, University of North Dakota, 2008

A Thesis

Submitted to the Graduate Faculty

of the

University of North Dakota

In partial fulfillment of the requirements

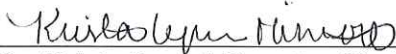
for the degree of

Master of Arts

Grand Forks, North Dakota

May
2018


This thesis, submitted by Natalie Martinson in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.



Dr. Krista Lynn Minnotte, Chairperson




Dr. Elizabeth Legerski

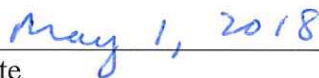


Dr. Daphne Pedersen

This thesis is being submitted by the appointed advisor committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.



Dr. Grant McGimpsey
Dean of the School of Graduate Studies



Date

PERMISSION

Title The Effects of Overnight Work Travel on Working Mothers and Fathers
Department Sociology
Degree Master of Arts

In presenting this thesis in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my thesis work, or in her absence, by the Chairperson of the department or the dean of the School of Graduate Studies. It is understood that any copying or publication or other use of this thesis or part thereof for financial gain shall not be allowed without any written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my thesis.

Natalie Martinson
April 16, 2018

TABLE OF CONTENTS

LIST OF TABLES.....	v
ACKNOWLEDGMENTS.....	vi
ABSTRACT.....	vii
CHAPTER	
I. INTRODUCTION.....	1
II. LITERATURE REVIEW.....	5
III. METHOD.....	17
IV. RESULTS.....	23
V. DISCUSSION AND CONCLUSION.....	33
REFERENCES.....	42

LIST OF TABLES

Table	
1. Descriptive Statistics.....	25
2. Regression Coefficients for Models Examining Work Travel and Sleep Problems.....	28
3. Regression Coefficients for Models Examining Work Travel and Psychological Distress.....	30
4. Regression Coefficients for Models Examining Work Travel and Health	31

ACKNOWLEDGMENTS

I would like to thank Dr. Legerski and Dr. Pedersen for being a part of my committee. Their support and encouragement throughout this process has been greatly appreciated. I would especially like to thank Dr. Minnotte, my committee chair and advisor, for her encouragement to pursue a Master's degree in Sociology. Dr. Minnotte has supported me throughout my graduate career and working with her on this thesis has helped me grow as a student, and I appreciated her feedback during the writing process, as well as the support she has provided me.

I always knew that I wanted to pursue a Master's degree but the timing never seemed right. I want to thank my husband and daughter for their support and motivation throughout my graduate career because at times, it took away from time spent with them.

ABSTRACT

Work-related travel has become more prevalent since the early 2000s due to the changing global economy (Jeong et al. 2013), and growth in job-related demands, such as traveling to meet customers, attend meetings, and participate in conferences (Gustafson 2006). Despite the benefits of overnight travel, there are drawbacks associated with traveling for work. Guided by role conflict theory and using secondary data from the 2008 National Study of the Changing Workforce, a subset of data was studied consisting of professional, managerial, and executive working mothers ($N = 241$) and working fathers ($N = 257$). This thesis considers how overnight work-related travel is related to mothers and fathers sleep problems, psychological distress, and health, while also taking into consideration control variables including, marital status, education, income, work hours, nonstandard hours, job autonomy, presence of preschool children, dual-earner status, race, and age. The results show that overnight work travel was not significantly related to psychological distress and health among mothers and fathers. Sleep problems was significantly related to mothers and overnight work travel, but not fathers. Implications, limitations, and areas for future research are discussed.

CHAPTER I

INTRODUCTION

This study examines the impacts of overnight work travel on mothers and fathers, and how it relates to a variety of outcomes, including sleep problems, psychological distress, and perceived health. The particular group of mothers and fathers that will be examined include those who are professionals, executives, or managers with children under 18 years of age living in the home. In this chapter, the topic of this study will be introduced, including the goals and contributions of this thesis, and a brief overview of the next four chapters will be given.

Background to the Problem

In the United States, approximately 32.5 million families include children under the age of 18 years old living in the home. In 2016, fathers participated in the labor force at a rate of 92.8 percent, while mothers were employed at a rate of 70.5 percent (U.S Department of Labor 2016). In nearly half of households with both a mother and a father present, 46 percent are dual earners with both parents employed full time, which has increased from 31 percent in 1970 (Bialik 2017). The demographics of parenthood have evolved over the last several decades, as more mothers have entered the paid labor force (Grice et al. 2007) and more fathers have taken a more active role in parenting (Parker and Livingston 2017). Indeed in 2015, fathers reported spending nearly seven hours a week on child care, a rate that had almost tripled from 1965 (Parker and Wang 2013a). Despite fathers spending more time parenting, American mothers spend nearly twice as much time with children than fathers

(Parker and Wang 2013b). Reflecting these trends, mothers and fathers reported higher levels of stress than they did two decades ago (Parker and Wang 2013a). Both parents feel pressed for time, with mothers and fathers reporting that there was little to no extra time to spend with each other, on hobbies, or with friends (Wang 2013). Overnight work travel can intensify these challenges.

Work-related travel has become more prevalent since the early 2000s due to the changing global economy (Jeong et al. 2013), and growth in job-related demands, such as traveling to meet customers, attend meetings, and participate in conferences (Gustafson 2006). Traveling for work is connected to gender patterns. According to Gustafson (2006), men travel more often than women for work, as they often are employed in occupations that require overnight travel as a job requirement (Jeong et al. 2013). As such, research shows that work travel is often a male activity that has long been associated with men and masculinity (Gustafson 2006). Traveling is also linked to occupation, as some occupations require more travel than others. Those in higher-level positions such as professionals, executives, and managers, may be in jobs requiring more travel.

The increasing rates of both mothers and fathers participating in the labor force, result in more time spent away from the home for overnight work travel. According to The Global Business Travel Association (2016), there were approximately 488 million business trips taken in 2015, and business travel has steadily increased since 2009, resulting in an average of nearly 12 trips per year for frequent travelers (U.S. Department of Transportation 2015). Overnight work travel can cause disruption in everyday life and negatively impact working mothers and fathers. According to Gustafson (2006), pre-trip stressors can include making arrangements at work and home for time absent, as well as arranging the work trip itinerary.

After returning from travel, stressors include catching up with office deadlines and feeling guilty for missing family obligations (Gustafson 2006). In addition, the longer the time that a parent spends traveling for work, the more stressful it can be for their families.

For many working mothers and fathers, traveling overnight for work can create consequences for family life. A variety of stressors have been identified when it comes to managing the impacts of a parent traveling overnight for work. Conflict that arises at home is typically experienced and handled differently by mothers and fathers (Wang 2013), and depending on if the mother or father is traveling for work, home responsibilities are taken care of in different ways. Women are more likely to take on more family work responsibilities than men, and often feel responsible for other tasks such as house work, child care, and travel arrangements, related to such demands (Jeong et al. 2013). Men typically participate in housework when it is convenient for them (Jeong et al. 2013). Given these patterns, understanding overnight work travel and how it impacts mothers and fathers is important.

Despite some previous research, scholarship related to work-related overnight travel remains relatively sparse. A component that remains under-examined is how overnight work-related travel impacts mothers and fathers, and how it relates to a variety of outcomes, including sleep problems, psychological distress, and perceived health. Building on existing research on work-related overnight travel, and informed by role conflict theory, this study will attempt to provide a comprehensive picture of the impacts of work travel for mothers and fathers who are professionals, executives, or managers with children under 18 years of age living in the home. This particular subset of working mothers and fathers is the main focus of this research because they are among the most likely to engage in overnight work-

related travel and typically have demanding jobs. Parents are focused on because of the demands of overnight work travel are more difficult to manage when there are responsibilities in the private sphere associated with children. Studying a variety of outcomes, such as sleep problems, psychological distress, and perceived health, will lead to a better understanding of the impacts of traveling overnight.

Overview of Thesis

In Chapter Two, an overview of previous literature and research will be provided, as well as an outline of the theoretical framework of role conflict theory, informing this study. Chapter Three will provide a description of the methods utilized for this thesis, including the data source, sampling strategy, and the measurement of the variables. In Chapter Four, results of the analysis will be presented, and finally, in Chapter Five, an in-depth discussion of the implications, limitations, and suggestions for beneficial areas of future research will be provided.

CHAPTER II

LITERATURE REVIEW

Guided by role conflict theory, this thesis examines the relationships between overnight work travel and outcomes among working mothers and fathers who are professionals, executives, or managers in their respective fields. This chapter begins with an overview of role conflict theory, followed by a review of existing literature related to the research question and the three proposed hypotheses.

Role Conflict Theory

For many of today's workers, work means travel. Over the last decade, jobs requiring overnight work travel have increased, and the type of worker who is affected by travel has broadened (Casinowsky 2013). Traveling for work includes visiting customers, attending meetings, and participating in conferences (Gustafson 2006). Overnight work travel provides men and women the opportunity to be away from the normal work setting, as well as enjoy freedom and independence from direct on-the-job supervision (Jeong et al. 2013). Evidence suggests that those who travel frequently for work tend to experience better career opportunities compared to those who have careers that do not require travel (Presser and Hermsen 1996). Despite the benefits of overnight travel, there are drawbacks associated with traveling for work. Role conflict theory can help us understand these challenges. Mothers and fathers enact many roles. Role conflict theory was developed to aid researchers in understanding how the different roles an individual occupies impact his or her everyday

life. According to Parsons and Shils (1951,2001:23) a “role” can be defined as a detailed set of obligations for interactions with others. Parenthood is an example of a role, as parents function as caregivers to their children, provide protection, socialization, and ensure their children are prepared to eventually take on adult roles (Hammond, Cheney, and Peaersey 2015). A role set can be defined as the particular roles attached to each person’s status (Hughes and Kroehler 2008). The status of each role is not fixed, as it can change in conjunction with each particular role set (Appelrouth and Edles 2011). According to Hughes and Kroehler (2008:60), “a role does not exist in isolation and the definition of one role depends on the existence of another.” Role sets can look different throughout the day as parents navigate work and family.

Role conflict occurs in situations in which there is difficulty in assuming and maintaining roles (Ivey and Robin 1966). Madsen and Hammond (2005) further explained that experiencing conflict between roles produces an undesirable state of being. According to role conflict theory, behavioral norms and expectations are established and perceived by others (Ivey and Robin 1966), and the construction of the parenthood role and its meaning is important for understanding how mothers and fathers enact their roles, or how satisfied they may feel within their roles (Lee, Zvonkovic, and Crawford 2014). Consequently, participating in multiple roles can place strain on a person or energize them (Hyde et al. 1995; Klein et al. 1998; Usdansky et al. 2012). Under the umbrella of role-conflict theory, the scarcity hypothesis suggests that the demands associated with social roles are cumulative. Therefore, adding an additional role increases the responsibilities an individual faces, and thereby also the likelihood of role overload or conflict (Hyde et al. 1995; Usdansky et al. 2012). For example, when mothers and fathers are traveling for work, they face family

demands, while also dealing with work demands on the trip. Overnight work travel and family demands are in direct competition with each other, and this conflict can lead to strain. Strain occurs when time requirements devoted to one particular role make it challenging to fulfill requirements of another role. Lastly, behaviors required by one role can make it difficult to participate in other roles (Greenhouse and Beutell 1985), potentially making traveling for work difficult for working mothers and fathers who are professionals, executives, or managers.

Role conflict theory helps pull together the three dependent variables of this study --- sleep problems, psychological distress, and perceived health--- because of its focus on how one role can be incompatible with another role (Kahn et al. 1964). Overall, role conflict theory assumes that the intersection of the two roles of traveling overnight for work and parenthood are incompatible, and feelings of strain will occur, resulting in reduced well-being.

Sleep Problems and Overnight Work Travel

Sleep is a vital part of daily functioning and affects physical and mental health (American Sleep Association 2018). According to the Centers for Disease Control and Prevention (2011), an estimated 35 percent of Americans are chronically sleep deprived. The CDC (2014) suggests that adults need seven or more hours of sleep per night for optimal health and well-being. Adults sleeping less than seven hours in a 24-hour period were more likely to be obese, physically inactive, and to have chronic health conditions (Allen and Kiburz 2012). Studies show disruption in sleep patterns increased the risk of diabetes and hypertension (Akdemir et al. 2013). Researchers suggest that sleep hygiene is achieved when the body passes through all four stages of sleep and the stage of rapid eye movement,

or REM sleep (American Sleep Association 2018). The variable sleep problems is conceptualized in this thesis as having trouble falling asleep, being awakened during sleep, and being unable to get back to sleep.

Mothers and fathers who engage in overnight work travel experience different schedules and their sleep patterns might be disrupted due to travel (Akdemir et al. 2013). Sleep loss can have a negative affect on family and interpersonal relationships and working parents that travel are particularly vulnerable to this phenomenon (Allen and Kiburz 2012). This may be connected to shift work disorder, which may cause disruptions in mothers' and fathers' sleep patterns (American Sleep Association 2018). Shift work disorder occurs when mothers and fathers have difficulty adjusting to their work schedules and those who experience this disorder typically sleep up to four hours less per night than individuals who do not have the disorder (American Sleep Association 2018). Mothers and fathers who travel for work can experience similar characteristics to shift work disorder when returning from travel, as stressors from adjusting back to their regular schedule can occur. For example, the nonstandard work schedule often experienced during work travel, may contribute to psychological distress due to disruption in sleeping patterns (Shepherd-Banigan et al. 2015).

Other research shows that sleep problems can also be caused by extensive work overload and stress (Akedimir et al. 2013). Work overload is connected with several sleep problems, such as falling asleep, maintaining sleep, and experiencing nonrestorative sleep (Schlarb, Reis, and Schröder 2012). Mothers and fathers who perceive their work as hectic, which may occur when traveling for work, experience significantly more problems with sleep than those who do not perceive their work schedule as busy (Schlarb et al. 2012). Sleep problems can also be attributed to disruptions in a normal routine. When mothers and fathers

travel for work, their normal routine is interrupted, and sleep problems can become a regular occurrence and affect their daily lives (American Sleep Association 2018; CDC 2014).

Overnight work travel can cause disruption in sleep patterns while traveling and upon return when adjusting back to daily schedules and responsibilities. Based on role conflict theory, and the previous research illustrating that mothers and fathers who travel overnight for work are more likely to experience disruption in sleep patterns (Allen and Kiburz 2012), the following hypothesis is proposed:

H1: Traveling for work will be positively associated with sleep problems for mothers and fathers who are professionals, executives, and managers.

Psychological Distress and Overnight Work Travel

Traveling for work can be rewarding, but it poses challenges for management of work and family responsibilities. Previous studies show that the demands of travel cause high levels of stress for travelers (Dimberg et al. 2002). Psychological distress is conceptualized in this thesis as a combination of several factors: perceived health, sleep problems affecting job performance, feelings of nervousness and stress, feeling down, depressed, and hopeless, and showing little interest or pleasure in things. The inclusion of sleep problems in the conceptualization is important because sleep problems are a key sign of psychological distress.

The challenge of coordinating family schedules when traveling overnight for work may increase family conflict and contribute to psychological distress among mothers and fathers (Shepherd-Banigan et al. 2015). The impact of being away from home that surrounds frequent travel may also contribute to psychological distress, as a constant need to adjust to separation can cause further feelings of stress (Dimberg et al. 2002).

Other factors might also contribute to psychological distress experienced by mothers and fathers who travel for work. Voydanoff (2005) suggested that strain-based demands can contribute to psychological distress for those who travel for work. Strain-based demands occur when work demands, such as traveling for work, cause energy depletion, negative emotions, and stress (Piotrkowski 1979; Rothbard 2001). Strain-based demands accompanying overnight travel can also contribute to time pressures faced when balancing traveling for work with responsibilities in the private sphere (Voydanoff 2005). This can lead to psychological distress and hinder participation in family life.

As predicted by role conflict theory, the role of traveling for work may result in psychological distress from participating in two roles simultaneously. When a job requires traveling, role overload can occur. Role overload can be defined as having too many role demands and not enough time to fulfill all of the demands (Coverman 1989). As outlined in role conflict theory, role overload experienced by working mothers and fathers can lead to elevated levels of stress, depression or anxiety, which can lead to diminished overall psychological health (Mailey et al. 2014). Based on role conflict theory and previous literature, the following hypothesis is proposed:

H2: Traveling for work will be positively associated with psychological distress for mothers and fathers who are professionals, executives, and managers.

Perceived Health and Overnight Work Travel

Health is linked to performance and productivity on the job, which can enhance overall organizational performance (Grzywacz, Carlson, and Shulkin 2008). Parenthood can be stressful, and balancing work travel and home responsibilities can take a toll on mothers' and fathers' health by creating physical and psychological demands on the body (Espino et

al. 2002). Perceived health is conceptualized in this thesis as how mothers and fathers rate their current state of overall health. Travel that is frequent or brings long-lasting absence from the home, and travel that interferes with family functions, can lead to extra stress for the travelers and their families (Gustafson 2006). The added stress from traveling for work can cause mothers' and fathers' perceived health to diminish.

Additionally, the combination of work, domestic, and childcare responsibilities leaves little time for leisure activities, as the transition to parenthood is often associated with declines in physical activity (Mailey et al. 2014). Physical inactivity can be caused by a number of different constraints, including lack of time, guilt, and schedule conflict (Mailey et al. 2014). All of these factors can be experienced while a parent is traveling for work. According to role theory, issues that occur for everyday working parents are magnified for parents who travel for work because of several roles that occur simultaneously between work and domestic duties. Based on role conflict theory, which suggests mothers and fathers who travel overnight for work may be more likely to experience diminished perceptions of overall health, the following hypothesis is proposed:

H3: Traveling for work will be negatively associated with perceived health for mothers and fathers who are professionals, executives, and managers.

Gender and Overnight Work Travel

Previous studies show that gender is an important factor when examining work travel. Gender is socially constructed, with social contexts providing avenues that help define the types of behaviors that are viewed as appropriate for each gender (Zvonkovic et al. 1996). The absence of one gender role, either the mother or father, shapes the organization and management of duties in the private sphere (Casinowsky 2013).

Even when mothers and fathers are working in the paid labor force at an equal rate, women still tend to shoulder the brunt of the organizational and managerial responsibility for the home (Casinowsky 2013). Mothers, more than fathers, also manage and arrange transportation for their children who are involved in after-school activities, leading to feelings of psychological distress (Zvonkovic, Swenson, and Cornwell 2017). When mothers are the more frequent traveler, this can challenge traditional gendered norms related to family responsibilities, and family demands may need to be reconstructed to fit the needs of the person who travels more frequently (Swenson and Zvonkovic 2016).

Research has shown that mothers who are professionals, executives, and managers experience additional pressures when balancing motherhood with their work life (Fine-Davis et al. 2004). According to Gustafson (2006), mothers experience more stress while traveling than fathers. With increased presence in the workforce that requires travel, challenges occur for working mothers as they facilitate the double burden of employment and domestic duties (Fine-Davis et al. 2004).

As noted, mothers and fathers take on many roles throughout the day. Depending on which parent is traveling, gender shapes parental roles and how travel impacts balancing work and family responsibilities. Role conflict theory helps in demonstrating differences of how each gender contributes to parental roles when one parent is traveling, while the other is responsible for the caregiving duties in the private sphere (Casinowsky 2013; Zvonkovic et al. 2017). Based on role conflict theory and previous literature, it is suggested that mothers experience greater difficulties when traveling for work. Therefore, the following hypothesis is proposed:

H4: Traveling overnight for work will impact the sleep problems, psychological distress, and perceived health for both mothers and fathers who are professionals, executives and managers, but the relationships will be stronger for mothers.

Background Factors

There are background factors that this thesis will also take into account when analyzing the impacts of overnight work travel on working mothers and fathers who are professionals, executives, and managers. These factors include marital status, education, income, work hours, job autonomy, dual-earner status, presence of preschool children, race, and age. Marital status is considered because being married and having a partner at home while traveling for work can make parenting responsibilities easier (Thomson and McLanahan 2012), thereby decreasing the negative impacts of work travel, such as psychological distress.

Education is another important factor because research has shown that it substantially impacts work travel. Indeed, mothers and fathers who are college educated are more likely to travel than those with a primary education (Gustafson 2006). Higher levels of education provide better career opportunities, which in turn make things easier for mothers and fathers to provide income for their families (McGill 2014), which could increase perceived health. The opposite could also be said because better job opportunities due to education levels, means more travel for work, which makes things harder on families, and therefore potentially increases levels of psychological distress and sleep problems. Income is examined because of the link between career opportunities and traveling for work. Regardless of gender, those who travel for work tend to have higher incomes than those who do not travel (Jeong et al. 2014; U.S. Travel Association 2017). A higher income decreases the financial burden for

families and can lead to decreased feelings of psychological distress for mothers and fathers (Thomson and McLanahan 2012)

Work hours are considered because those who work more hours may experience more psychological distress and disruptions in sleeping patterns (Espino et al. 2002). A nonstandard work schedule makes having a consistent schedule difficult, which can increase levels of psychological distress. A nonstandard work schedule can also increase disruption in sleep problems and lower levels of perceived health (Espino et al. 2002).

Job autonomy is taken into consideration because it is important for mothers and fathers to decide how they get to spend their time completing job related tasks while working (Ammons 2013). Autonomy may assist mothers and fathers rebound better when returning from travel, while catching up with work missed while traveling and home related tasks. Perceived autonomy within the workplace could lead to lower levels of psychological distress and higher levels of overall health because of the ability to manage their work tasks (Chiang et al. 2016).

Dual-earner status will be looked at because prior research has shown the number of families becoming dual-earners since 1970 has substantially increased (Offer and Schneider 2011). With both parents working, combined income will be higher, which in turn potentially decreases levels of psychological distress and increases parents' perceived health. Dual-earner status could also potentially increase psychological distress because the mother or father at home is also employed and unable to pick up the slack at home while the other is traveling.

The variable preschool children living in the home was considered because in 2010, according to the U.S. Department of Labor, the employment rate of women with infants was

56.5%, compared to just 17% of mothers in the early 1960s (Perry-Jenkins et al. 2011). The rising number of employed women of childbearing age underlies the importance of understanding the intensity of caregiving during this stage and how work travel affects parents with young children. Having a child at the preschool age, could make things harder, and therefore increase levels of psychological distress and sleep problems.

Race and age are examined because they are key socioeconomic factors when studying work travel. Race is included because whites are more likely to work in occupations that require overnight work travel compared to non-whites (U.S. Department of Labor 2016). According to the U.S. Department of Labor (2016), whites are engaging in more work travel, which could cause increased levels of psychological distress and make it harder to manage work and family, compared to non-whites who are not engaging in frequent work travel (Swenson and Zvonkovic 2016). Previous literature has also linked race to psychological distress (Kessler and Neighbors 1986). Minority groups tend to have worse health outcomes and race has been connected to health through social statuses and risk factors of the individual (Williams, Lavizzo-Mourey, and Warren 1994).

According to the U.S Travel Association (2017), older workers are more likely to travel than their younger coworkers, as the average age of mothers and fathers who travel frequently is 49.5 years old. However, young adults, or “millennials”, are more excited to travel for work than the baby boomer group (Global Business Travel Association 2015). Age is important to the well-being of the traveler and the older the mother and father are, the harder work travel will be on their family, therefore this thesis controls for age.

Summary and Organization of the Next Chapter

This chapter provided background on various characteristics of overnight work travel. Based on role conflict theory, four hypotheses were proposed. Previous research on impacts of overnight work-related travel is sparse, particularly for mothers and fathers who are professionals, executives, and managers. The goal of this thesis is to contribute to filling the gap in the literature and provide evidence of the impacts of overnight work-related travel on mothers and fathers, and how it relates to a variety of outcomes, including sleep problems, psychological distress, and perceived health. In Chapter Three, the method utilized for this thesis will be discussed in detail, as well as information about the dataset. Furthermore, details on how the variables were measured will be described, as well as the analytical strategy employed to answer the research question.

CHAPTER III

METHOD

This thesis will provide a quantitative analysis of how overnight work-related travel impacts working mothers and fathers who are professionals, executives, and managers with children under 18 years of age living in the home. This chapter provides an explanation of the method used to analyze the research question. The chapter begins with a detailed description of the dataset used, followed by an explanation of how the independent and dependent variables were measured. The final part of this chapter provides an overview of the analytical strategy employed to answer the research question.

Data

The data for this research were obtained from the 2008 wave of the National Study of the Changing Workforce (NSCW). In the late 1960s, the U.S. Department of Labor funded three Quality of Employment Surveys (QES). The surveys for this project concluded in 1977, and they were the first large, representative samples of the United States workforce. The study not only gathered data on work characteristics, but also took a deep look into workers' personal lives. Due to a lack of funding from the U.S. Department of Labor, the Families and Work Institute obtained private funding for the National Study of the Changing Workforce in 1990 (NSCW 2011). The purpose of the NSCW is to study the United States workforce, and it takes an in-depth look at the lives of employees on and off the job. It is the only ongoing, national study looking at both of these components. The study is conducted every five years, with the first study conducted in 1992 (NSCW 2010).

The 2008 National Study of the Changing Workforce was conducted by Harris Interactive and utilized a questionnaire that was developed by the Families and Work Institute. The study included many questions that were asked in the 1977 Quality of Employment Survey (NSCW 2010). A total of 3,502 interviews were completed by telephone, a 54.6 percent response rate of those identified as eligible to participate in the survey (NSCW 2010). Eligibility requirements were limited to those who worked at a paid job, were 18 years or older, were employed in the civilian labor force, resided in the 48 contiguous states, and lived in a non-institutional residence with a telephone (NSCW 2010). Using a computer-assisted telephone interviewing (CATI) system, the interviews typically lasted 50 minutes and the sample was a regionally stratified, unclustered random probability sample, generated by a random-digit-dial method (NSCW 2010). In this thesis, a subset of data will be studied consisting of professional, managerial, and executive working mothers ($n = 241$) and working fathers ($n = 257$).

Measures

Dependent Variables

This study includes three dependent variables: psychological distress, sleep problems, and perceived health. *Sleep problems* was measured with a three-item index with a Cronbach's alpha of .73, and responses to items included in the index were averaged. Respondents indicated the extent of their sleep problems by responding to the following questions: (1) How often have you had trouble sleeping to the point that it affected your performance on and off the job?, (2) How often have you had trouble falling asleep when you go to bed?, and (3) How often have you awakened before you wanted to and had trouble

falling back asleep? The items were coded as (1) = never, (2) = almost never, (3) = sometimes, (4) =fairly often, and (5) = very often. Higher scores indicate higher sleep disruption.

Psychological distress was operationalized with a combination of five items with a Cronbach's alpha of .70. Respondents indicated the extent of their level of psychological distress within the last month by responding to the following items: (1) Have you been bothered by minor health problems such as headaches, insomnia, or stomach upsets?, (2) How often have you had trouble sleeping to the point that it affected your performance on and off the job?, (3) How often have you felt nervous and stressed?, (4) During the past month, have you been bothered by feeling down, depressed, or hopeless, and (5) During the past month, have you been bothered by little interest or pleasure in doing things? The first three items were coded as (1) = never, (2) = almost never, (3) = sometimes, (4) =fairly often, and (5) = very often. The last two items were coded as (1) = no and (5) = yes. Items were summed and divided by five. Higher scores indicate higher levels of psychological distress.

Perceived health was measured by asking respondents "How would you rate your current state of health- excellent, good, fair, or poor?" (NSCW 2008). This variable was coded as (1) = poor, (2) = fair, (3) = good, and (4) = excellent.

Independent Variable

This study includes one main independent variable: work travel. *Work travel* was measured by asking respondents, "During the past three months, how many nights have you been away from home on business?" Work travel was recoded with days away from the home ranging from 0 days up to 30 days. Those traveling more than 30 days were coded as

30 due to outliers that may skew the results. There were five cases that were recoded in this manner.

Control Variables

This analysis also considers several control variables, including gender, marital status, education, income, work hours, nonstandard work hours, job autonomy, dual-earner status, presence of preschool age children, race, and age.

Gender was coded as (0) = women and (1) = men. *Marital status* was coded as legally married and living with their partner (1) and (0) = not legally married. The coding for education was as follows: (1) = less than high school, (2) = high school or GED, (3) = some college, no degree, (4) = associate degree, (5) = 4-year college degree, and (6) = graduate or professional degree.

Income was measured as total family income for 2008, and was coded in quintiles: (1) = Less than \$32,099, (2) = \$32,100 to \$56,159, (3) = \$56,160 to \$81,119, (4) = \$81,120 to 124,799, and (5) = \$124,800 and higher.

The variable *work hours* was coded as all hours worked during the week. *Nonstandard work hours* was coded as (0) = works regular hours and (1) = works nonstandard work hours. Nonstandard work hours are defined as working nights, weekends, or rotating shifts and respondents indicated their work hours with the following item, “What would you say your usual hours have been on average the past four or five months?”

Job autonomy was measured with a three-item index with a Cronbach’s alpha of .77 and the items were summed and averaged. Respondents indicated the extent of their agreement with the following items: (1) I have the freedom to decide what I do on my job, (2) It is basically my own responsibility to decide how my job gets done, and (3) I have a lot

of say about what happens on my job. The three items of the job autonomy index were recoded as (1) = strongly disagree, (2) =somewhat disagree, (3) somewhat agree, (4) =strongly agree. Higher scores indicated a higher degree of perceived job autonomy.

Dual-earner status was coded as (1) = is partnered and their partner works, and (0) = some other situation. *Presence of preschool aged children* in the home was recoded as (1) = yes at least one child under age six in the home and (0) = no children under age six in the home. *Race* was recoded as (1) = white, non-Hispanic (2) = some other race/ethnicity. *Age* was coded in years.

Analytical Strategy

The purpose of this study is to analyze the impacts of work-related travel on working mothers and fathers who are professionals, executives, and managers with children under 18 years of age living in the home. To test the hypotheses, separate analyses will be conducted for men and women to see if work travel impacts men and women differently. All statistical analyses will be done using SPSS. Specifically, separate regression analyses for each dependent variable will offer insight into how overnight work-related travel affects mothers and fathers. The regression for each dependent variable will include two models. The first regression model will look at only the control variables. The second regression model will add the key independent variable of work travel. This allows us to determine how adding work travel to the regression for each dependent variable contributes to the percentage of variation explained.

Summary and Organization of Next Chapter

This chapter began with a description of the data being utilized to answer the research question. Next, the measurements of the independent and dependent variables were given.

Lastly, this chapter discussed the analytical strategy that will be used to answer the research question. In Chapter Four, the findings of this thesis will be discussed.

CHAPTER IV

RESULTS

This study examines the impacts of overnight work-related travel on mothers and fathers, and how it relates to a variety of outcomes, including sleep problems, psychological distress, and perceived health. This chapter presents the findings. First, descriptive statistics will be provided, including the means and standard deviations of the variables. Second, linear regression analyses for each dependent variable will offer insight into whether overnight work-related travel affects mothers and fathers. This chapter will also discuss whether the results support the hypotheses.

Descriptive Statistics

Descriptive statistics are presented in Table 1. The mothers and fathers that were examined included those who are professionals, executives, or managers with children under 18 years of age living in the home. Within the last three months, mothers traveled for work an average of 1.39 days ($SD = 3.93$) and fathers, on average, traveled 3.92 days ($SD = 7.67$). The mean score for psychological distress for mothers was 2.31 ($SD = .92$) and for fathers it was 2.14 ($SD = .88$), indicating that on average both experienced low levels of psychological distress. On average, mothers experienced moderate sleep problems with a mean score of 2.46 ($SD = 1.02$), while fathers also experienced moderate sleep problems with a mean score of 2.32 ($SD = .97$). Mothers and fathers both had a mean health score of 3.13 ($SD = .73$; $SD = .70$), indicating that on average they viewed their health as good.

For the control variables, 77 percent of mothers were married compared to 90 percent of fathers. The mean score for education for mothers was 4.30 ($SD = 1.46$) and for fathers the mean score was 4.55 ($SD = 1.44$), indicating that on average the respondents had at least an associate's degree. For mothers, the mean income was 3.52 ($SD = 1.31$), indicating that on average mothers had a family income between \$56,160 - \$81,119. For fathers, the mean score for income was 3.91 ($SD = 1.16$), indicating that, on average, fathers also had a family income between \$56,160 - \$81,119, but slightly closer to the next income bracket, compared to mothers. In terms of work hours, mothers had a mean score of 41.33 ($SD = 14.23$), indicating that they worked, on average, a little over 40 hours a week. Fathers had a mean score of 49.73 ($SD = 12.63$), indicating that they worked an average of about 50 hours a week. A total of 16 percent of the mothers worked nonstandard hours, while 19 percent of fathers worked these hours. Job autonomy had a mean score of 1.76 for mothers ($SD = .73$) and a mean score of 1.71 for fathers ($SD = .66$), indicating that the respondents experienced moderate levels of job autonomy. For mothers, 77 percent were in a dual-earner relationship, meaning that they were partnered and their partner worked, while 73 percent of fathers were part of a dual-earner couple. Approximately 70 percent of mothers and 60 percent of fathers had children under age six living in the household. Among mothers, 80 percent of the sample was white or non-Hispanic, and for fathers 88 percent of the sample was white or non-Hispanic. The mean age for mothers was 41.26 years old ($SD = 8.33$) compared to a mean age of 43.59 years old ($SD = 8.85$) for fathers.

Regression

Linear regression was performed to examine the relationships between psychological distress, sleep problems, health and work travel. The mothers and fathers that were examined

included those who were professionals, executives, or managers with children under 18 years of age living in the home. The regression for each dependent variable includes two models. The first regression model looks at only the control variables, including marital status, education, income, work hours, nonstandard hours, job autonomy, presence of preschool children, dual-earner status, race, and age. The second regression model added the key independent variable of work travel.

Table 1: Descriptive Statistics (Mothers N=241; Fathers N= 257)

Variables	Range	Mothers <i>M (SD)</i>	Fathers <i>M (SD)</i>
Work Travel	0-30	1.39 (3.92)	3.92 (7.67)
Psychological distress	1-5	2.31 (.92)	2.14 (0.88)
Sleep Problems	1-5	2.46 (1.02)	2.32 (0.97)
Health	1-4	3.13 (.73)	3.13 (0.7)
Marital status ^a	0,1	0.77	0.9
Education	1-6	4.2 (1.46)	4.55 (1.44)
Income	1-5	3.52 (1.31)	3.91 (1.16)
Work Hours	3-105	41.33 (14.23)	49.73 (12.63)
Nonstandard work hours ^b	0,1	0.16	0.19
Job Autonomy	1-4	3.24 (0.73)	3.29 (0.66)
Dual-earner status ^c	0,1	0.77	0.73
Presence of preschool children ^d	0,1	.70	.60
Race ^e	0,1	.799	.876
Age	21-99	41.26 (8.33)	43.59 (8.85)

^a1= legally married. ^b1= works nonstandard work hours. ^c1= partner works for pay. ^d1=child under six living in the home. ^e1= identifies as white and nonhispanic.

Table 2 presents the results for mothers and fathers in predicting sleep problems. Education was significantly and negatively (Mothers M1: $\beta = -.26, p < .001$; Fathers M1: $\beta = -.158, p < .01$) related to sleep problems for mothers and fathers in Model 1, which indicates that individuals with higher levels of education experienced sleep problems less often. Education was also significant in Model 2, indicating when adding work travel, that individuals with higher levels of education experienced sleep problems with less frequency. Job autonomy was

significantly and negatively (M1: $\beta = -.13, p < .05$) related to sleep problems for mothers in Model 1. In Model 2, there was no change (M2: $\beta = -.138, p < .05$), indicating that mothers with high job autonomy, experienced less frequent sleep problems than those with low autonomy. The findings indicate that Hypothesis 1, which states traveling for work will be negatively associated with sleep problems for mothers and fathers who are professionals, executives, and managers, was partially supported, as mothers who traveled for work ($\beta = .147, p < .05$) experienced sleep problems more frequently, but fathers did not.

For Model 1, including mothers and fathers and the control variables, the results indicate that 5.8 percent (*Adjusted R*² = .058) of the variation for mothers and 3.3 percent (*Adjusted R*² = .033) of the variation for fathers is explained by the control variables in the sample. The change in *F* was significant for mothers (*F* Change = 5.007; $p < .05$) in Model 2, but not for fathers, indicating that the addition of the sleep problems to the OLS regression significantly improved the estimates of sleep problems among women.

Table 3 presents the results of the regression analyzing psychological distress for mothers and fathers. Education was significantly and negatively (Mothers M1: $\beta = -.154, p < .05$; Fathers M1: $\beta = -.184, p < .01$) related to psychological distress for mothers and fathers in Model 1, indicating that individuals with higher levels of education had less psychological distress. In Model 2, which adds work travel, (Mothers M2: $\beta = -.144, p < .05$; Fathers M2: $\beta = -.185, p < .01$), there was no change compared to Model 1 and the relationship between education and the dependent variable, was still significant, but not quite as strong.

The variable work hours in Model 1 was significantly and positively (M1: $\beta = .136, p < .05$) related to psychological distress among only fathers, indicating that fathers who work more hours report more psychological distress than those working fewer hours. In Model 2, which adds

work travel, (M2: $\beta = .129, p < .05$), there was no change compared to Model 1, and the relationship between work hours and the dependent variable had similar strength. Job autonomy was significantly and negatively related to psychological distress for mothers and fathers in both Model 1 (Mothers M1: $\beta = -.22, p < .001$; Fathers M1: $\beta = -.152, p < .05$), and Model 2 (M2: $\beta = -.21, p < .001$; M2: $\beta = -.15, p < .05$), indicating that individuals with lower levels of job autonomy have higher levels of psychological distress. Overall, the results from Table 3 indicate that Hypothesis 2 was not supported for mothers and fathers, as work travel was not significantly related psychological distress in Model 2.

Model 1 explains 4.6 percent (*Adjusted R*² = .046) of the variation in psychological distress for mothers and 5 percent (*Adjusted R*² = .05) of the variation in psychological distress for fathers. For Model 2, which added the key independent variable of work travel, the results indicate that 4.5 percent (*Adjusted R*² = .045) of the variation for mothers and 4.9 percent (*Adjusted R*² = .049) of the variation for fathers is explained by the control variables and the independent variable in the sample. The change in F from Model 1 to Model 2 is not significant.

Table 4 presents the results of the regression predicting health for mothers and fathers. Education was significantly and positively (M1: $\beta = .243, p < .001$) related to health for fathers in both Models, which indicates that fathers with higher levels of education had better perceptions of overall health. In Model 2, education remains significant for fathers. Income was significantly and positively (M1: $\beta = .235, p < .01$) related to health for mothers in Model 1, with those reporting higher household income also reporting better health.

Table 2: Regression Coefficients for Models Examining Work Travel and Sleep Problems (Mothers $N = 241$; Fathers $N = 257$)

Model	1		2		1		2					
	Mothers		Mothers		Fathers		Fathers					
Variables	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>B</i>	<i>SE B</i>	β
Marital status ^a	-.384	.238	-.159	-.388	.236	-.16*	-.047	.229	-.015	-0.05	.23	-.016
Education	-.179	.049	-.26***	-.198	.049	-.28***	-.106	.046	-.158*	-.106	.046	-.158*
Income	.061	.062	.077	.079	.062	.099	-.0093	.06	-.11	-.094	.06	-.111
Work hours	.008	.005	.105	.006	.005	.079	.004	.005	.046	.003	.005	.043
Nonstandard work hours ^b	.224	.181	.081	.15	.182	.054	-.19	.158	-.008	-.029	.161	-.012
Job autonomy	-.183	.091	-.13*	-.194	.091	-.138*	-.169	.094	-.115	-.167	.095	-.114
Dual-earner status ^c	.248	.239	.102	.211	.237	.087	.031	.152	.014	.033	.152	.015
Preschool child ^d	.076	.181	.034	.042	.18	.019	-.155	.144	-.079	-.156	.144	-.079
Race ^e	.011	.169	.004	.011	.167	.004	.211	.19	.072	.213	.19	.073
Age	.035	.096	.03	.049	.096	.041	.058	.081	.052	.059	.081	.053
Work Travel	---	---	---	.038	.017	.147*	---	---	---	.002	.008	.019
R^2		.097			.117			.071			.071	
Adjusted R^2		.058			.074			.033			.029	
Change in R		0.097			.019			.071			.000	
<i>F</i>		2.467**			2.737**			1.877*			1.707	
Change in <i>F</i>		2.467			5.01			1.877			0.085	

Notes: NSCW 2008; ^a1= legally married. ^b1= works nonstandard work hours. ^c1= partner works for pay. ^d1=child under six living living in the home. ^e1= identifies as white or nonhispanic. * $p < .05$, ** $p < .01$, *** $p < .001$

In Model 2, income remained significant for mothers (M2: $\beta = .247, p < .01$). Job autonomy was significantly and positively (M1: $\beta = .138, p < .05$), related to health for fathers in Model 1, indicating that individuals with higher autonomy, report better health. In Model 2, there was no change for fathers (M2: $\beta = .135, p < .05$). Preschool aged children was significantly and positively (M1: $\beta = .196, p < .01$), related to health for fathers in Model 1, indicating that fathers who had preschool aged children living in the home reported better health. The variable preschool children was also significant for fathers in Model 2. Overall, the results from Table 4 indicate that Hypothesis 3, which states that traveling for work will be negatively associated with perceived health for mothers and fathers who are professionals, executives, and managers, was not supported, as work travel was not significantly related to health in this study.

For Model 1, that includes the control variables, the results indicate that 4.8 percent (*Adjusted R*² = .048) of the variation for mothers and 9.4 percent (*Adjusted R*² = .094) of the variation for fathers is explained by the control variables in the sample. For Model 2, which adds the key independent variable of work travel, the results indicate that 5 percent (*Adjusted R*² = .05) of the variation for mothers and 9.5 percent (*Adjusted R*² = .095) of the variation for fathers is explained by the control variables and the independent variable. The change in *F* for Model 2 was not significant for mothers or fathers.

Hypothesis 4 stated traveling overnight for work will impact the sleep problems, psychological distress, and perceived health for both mothers and fathers who are professionals, executives and managers, but the relationships will be stronger for mothers. In regards to Hypothesis 4, the results show that work travel mattered more for mothers in regards to one dependent variable.

Table 3: Regression Coefficients for Models Examining Work Travel and Psychological Distress (Mothers $N = 241$; Fathers $N = 257$)

Model	1			2			1			2		
	Mothers			Mothers			Fathers			Fathers		
Variables	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Marital status ^a	.151	.214	.07	.152	.214	.07	.072	.206	.025	.064	.206	.023
Education	-.096	.044	-.154*	-.089	.045	-.144*	-.112	.042	-.184**	-.112	.042	-.185**
Income	-.037	.056	-.052	-.043	.056	-.06	-.062	.054	-.081	-.064	.054	-.083
Work hours	-.001	.004	-.017	.000	.004	-.007	.009	.004	.136*	.009	.005	.129*
Nonstandard work hours ^b	.253	.162	.102	.278	.165	.113	-.031	.141	-.014	-.054	.144	-.024
Job autonomy	-.27	.082	-.22***	-.027	.082	-.21***	-.201	.085	-.152*	-.198	.085	-.15*
Dual-earner status ^c	-.203	.214	-.094	-.191	.215	-.088	.046	.136	.023	.05	.136	.026
Preschool child ^d	.037	.162	.019	.049	.163	.025	-.042	.129	-.024	-.046	.129	-.026
Race ^e	.007	.152	.003	.007	.152	.003	.034	.17	.013	.041	.17	.015
Age	.044	.086	.042	.039	.087	.037	.032	.072	.032	.035	.073	.035
Work travel	---	---	---	-.013	.015	-.056	---	---	---	.006	.007	.052
R^2		.086			.089			.088			.089	
<i>Adjusted R</i> ²		.046			.045			.05			.049	
Change in <i>R</i>		---			.003			---			.002	
<i>F</i>		2.143*			2.012*			2.364**			2.206*	
Change in <i>F</i>		---			0.721			---			.662	

Notes: NSCW 2008; ^a1= legally married. ^b1= works nonstandard work hours. ^c1= partner works for pay. ^d1=child under six living living in the home. ^e1= identifies as white or nonhispanic. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4: *Regression Coefficients for Models Examining Work Travel and Health* (Mothers $N = 241$; Fathers $N = 257$)

Model	1			2			1			2		
	Mothers			Mothers			Fathers			Fathers		
Variables	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Marital status ^a	.073	.171	.042	.071	.17	.042	-.083	.161	-.036	-.073	.161	-.032
Education	-.005	.035	-.011	-.013	.036	-.026	.118	.032	.243***	.118	.032	.243***
Income	.133	.045	.235**	.139	.045	.247**	.01	.042	.017	.013	.042	.021
Work hours	-.003	.004	-.05	-.003	.004	-.064	-.001	.004	-.021	-.001	.004	-.01
Nonstandard work hours ^b	-.117	.129	-.059	-.146	.131	-.074	-.141	.111	-.078	-.114	.113	-.063
Job Autonomy	.092	.065	.092	.088	.065	.088	.147	.066	.138*	.143	.066	.135*
Dual-earner Status ^c	-.143	.171	-.082	-.157	.171	-.091	-.191	.107	-.122	-.196	.107	-.125
Preschool Child ^d	-.229	.129	-.144	-.242	.13	-.153	.28	.101	.196**	.285	.101	.20**
Race ^e	.07	.121	.042	.07	.121	.039	-.083	.133	-.039	-.091	.133	-.043
Age	-.04	.004	-.047	-.034	.069	-.041	-.094	.057	-.117	-.098	.057	-.122
Work Travel	---	---	---	.015	.012	.082	---	---	---	-.007	.006	-.075
R^2		.088			.094			.129			.134	
<i>Adjusted R</i> ²		.048			.05			.094			.095	
Change in <i>R</i>		---			0.006			---			.005	
<i>F</i>		2.205*			2.147*			3.65***			3.46***	
Change in <i>F</i>		---			1.515			---			1.477	

Notes: NSCW 2008; ^a1= legally married. ^b1= works nonstandard work hours. ^c1= partner works for pay. ^d1=child under six living living in the home. ^e1= identifies as white or nonhispanic. * $p < .05$, ** $p < .01$, *** $p < .001$

Findings from Tables 2, 3 and 4 show that traveling overnight for work only impacts mothers when predicting sleep problems ($\beta = .147, p < .05$), but was not significant for any of the dependent variables for fathers.

Summary and Organization of the Next Chapter

This chapter presented the findings of this research. Descriptive statistics, including the means and standard deviations of the variables, were described. The results of the linear regression analysis indicated different things for each dependent variable. For psychological distress, the results indicated that education and job autonomy were significantly related for mothers to psychological distress; while education, work hours, and job autonomy were significantly related to fathers' psychological distress. For sleep problems, education and job autonomy were significantly related to mothers' sleep problems, while the variable education was significantly related to fathers' sleep problems. For health, income was significantly related to mothers' perceived health; while education, job autonomy, and presence of preschool aged children were significantly related to fathers' perceived health. Work travel was not significantly related to psychological distress or perceived health for mothers or fathers. Sleep problems were significant for mothers, but not for fathers.

Chapter Five will present a summary of the results, relating the findings back to previous literature on overnight work travel. The contributions of this research will be discussed in reference to current literature, as well as the implications of work travel for working mothers and fathers who are professionals, executives, and managers. The chapter will end with a final discussion of the limitations to the research and how future research can explore overnight work travel for working parents.

CHAPTER V

DISCUSSION AND CONCLUSION

In this final chapter, a summary of the results will be presented, relating the findings to the literature about the impacts of overnight work travel for working mothers and fathers who are professionals, executives, and managers. A discussion will be provided about how this thesis contributes to current literature, as well as implications this research has for overnight work travel. Lastly, the limitations of the research will be discussed, and suggestions for future research will be explored.

Discussion

Guided by role conflict theory, this study examined the impacts of overnight work-related travel on mothers and fathers, and how it related to a variety of outcomes, including psychological distress, sleep problems, and perceived overall health. The mothers and fathers examined were professionals, executives, or managers with children under 18 years of age living in the home. Four hypotheses were created and tested using separate linear regression analyses for each dependent variable from the 2008 wave of the National Study of Changing Workforce. Each regression analysis for the dependent variables included two models. The first regression model looked at only the control variables and the second regression model added the key independent variable of work travel. The study controlled for ten variables in each model including: marital status, education, income, work hours, nonstandard hours, job

autonomy, dual-earner status, presence of preschool children, dual-earner status, race, and age. In terms of the variable work travel, the results indicated mothers' sleep problems are appeared to become more frequent when they travel for work, and in this respect, mothers and fathers in this study differ.

Sleep Problems and Overnight Work Travel

This study shows that mothers experienced more frequent sleep problems than fathers in relation to work travel. As sleep is a vital part of daily functioning and affects physical and mental health (American Sleep Association 2018), this study suggests that mothers who engage in overnight work travel experience sleep issues that may impact their well-being (Akdemir et al. 2013). As previous studies have shown that sleep loss can also have a negative effect on family, an implication might be that the family relationships of working mothers who travel are particularly vulnerable to this phenomenon (Allen and Kiburz 2012).

The study indicated for mothers and fathers, education was significantly and negatively related to sleep problems. A possible explanation for this could be that parents who have higher levels of education, experience less sleep issues because they have more resources, knowledge, and skills to deal with life stressors. Job autonomy was significantly and negatively related to sleep problems for mothers only. This explanation is supported by literature that states employees are less stressed and experience less sleep problems with more perceived job autonomy (Chung-Yan 2010), which could result sleep problems occurring less frequently. Previous literature states that mothers are more likely than fathers to have their sleep interrupted in response to their children throughout the night and the quality of maternal sleep is directly related to their mood, stress, and fatigue (Meltzer and Mindell 2007). As this thesis found, traveling for work appears to potentially compound this

issue by increasing the frequency of sleep problems among mothers. The findings connect back to role conflict theory, as mothers have a harder time balancing the roles of work and family when they adopt the additional role of traveling for work.

Psychological Distress and Overnight Work Travel

Overnight work travel was not significantly related to psychological distress for mothers or fathers who were professionals, executives, or managers. This may not be surprising, given that the average days spent traveling for work in the last three months was less than four for both men and women. The findings indicated among both mothers and fathers, education was significantly and negatively related to psychological distress. A possible explanation for this could be that those who have attained higher levels of education experience lower levels of psychological distress because they have better cognitive abilities and skills to cope with stressors in life (Mandemakers and Monden 2010). Job autonomy was significantly and negatively related to psychological distress for both mothers and fathers. This finding is supported by literature that shows higher levels of job autonomy result in beneficial outcomes among mothers and fathers, such as higher job satisfaction, organizational commitment, job performance, and motivation (Chung-Yan 2010). The results also showed that fathers' work hours were significantly and positively related to psychological distress, which can be explained by the fathers experiencing taxing effects from working longer hours.

As outlined in role conflict theory, role overload experienced by working mothers and fathers can lead to elevated levels of stress, depression or anxiety, which can lead to diminished overall psychological health (Mailey et al. 2014) and previous research showed that the demands of travel result in high levels of stress for travelers (Dimberg et al. 2002).

In contrast to role theory, this thesis found that traveling overnight for work-related travel did not cause higher levels of psychological distress. The findings were interesting given that Offer (2014) discusses that many parents are facing increasing demands and time squeezes as they are in constant battle with juggling work and family. Therefore, parents are engaging in mental labor and should experience increased levels of psychological distress when they deal with the additional burden of travel, with mothers tending to bear the most burden (Offer 2014). However, in this study, the findings indicated that work travel did not have a significant impact on psychological distress for mothers and fathers in this study. This suggests the respondents appear to manage their work and family responsibilities without high levels of psychological distress when traveling. An explanation for this finding could be that traveling is like a vacation away from family responsibilities and the opportunity to be away from the normal work setting and enjoy freedom and independence from direct on-the-job supervision (Jeong et al. 2013). The benefits may offset the stressors associated with work travel. Further, this sample of mothers and fathers are likely economically privileged and have the resources to cope with feelings of stress that might arise from traveling better than others. This connects back to role conflict theory because mothers and fathers enact many roles and participate in various role sets throughout their day, and appear to manage the role of work travel without distress.

Perceived Health and Overnight Work Travel

Overnight work travel was not significantly related to health for both mothers and fathers who are professionals, executives, or managers. The state of someone's health unfolds across the life course, and therefore may not be harmed by a few days of work travel each month. When looking at health, the study indicated for fathers, education was

significantly and positively related to health. A possible explanation for this would be that higher levels of education provide fathers with better knowledge about healthy behaviors, including the avoidance of risky behaviors. When looking at health, the study indicated for mothers, income was significantly and positively related to health. In turn, this makes things easier for mothers to provide income for their families, allowing better resources for taking care of health (McGill 2014). Higher incomes may decrease the financial burden for families and allow better access to health-related care (Thomson and McLanahan 2012). Higher household income has also been linked to better health in past research (Ettner 1996). Job autonomy was significantly and positively related to health, but only for fathers who were traveling more. A possible explanation backed by the literature is that job autonomy is positively associated with important job attitudes and organizational behaviors, which could promote more positive feelings of health (Chung-Yan 2010). Lastly, for fathers only, the presence of a preschool-aged in the home, was significantly and positively related to health. A possible explanation for this finding is that men with very young children are more likely to suffer from health issues due to lack of sleep or altered schedules, but as their children age, men's health improves (Gray and Anderson 2010).

Parenthood can be stressful and the findings that work travel was not significantly related to mothers' and fathers' health was interesting, as balancing work travel and home responsibilities can take a toll on mothers' and fathers' health by creating physical and psychological demands on the body (Espino et al. 2002). As outlined in role theory, issues that occur for everyday working parents are magnified for parents who travel for work of the additional role responsibilities. The construction of the parenthood role and its meaning is important for understanding how mothers and fathers enact their roles, or how satisfied they

may feel within their roles (Lee et al. 2014). Consequently, participating in multiple roles can place strain on a person or energize them (Hyde et al. 1995; Klein et al. 1998; Usdansky et al. 2012). This study shows that the multiple roles that parents are enacting while traveling for work do not appear to harm health, but instead might result in parents feeling energized because they feel rejuvenated due to time away from family responsibilities.

Gender and Overnight Work Travel

Gendered patterns often underlie traveling for work. According to Gustafson (2006), men travel for work more often than women, as they are often employed in occupations that require overnight travel as a job requirement (Jeong et al. 2013). Further, as noted, when women travel for work it may be more disruptive to family routines, given gendered divisions of household labor (Casinowsky 2013; Zvonkovic et al. 2017). In this thesis, only one gender pattern emerged because work travel was significant in predicting women's sleep problems, where as no such relationship existed among fathers. Work travel might be more likely to impact women's sleep problems because sleep problems can also be attributed to disruptions in a normal routine. As found, traveling for work may lead mothers' normal routines to be interrupted (American Sleep Association 2018; CDC 2014). Sleep loss has also been attributed to have a negative effect on family and interpersonal relationships and this phenomenon seems to affect mothers more than fathers. This may be because of gendered divisions of labor and mothers possibly feeling overwhelmed when they return from traveling for work (Allen and Kiburz 2012).

Implications

This study has implications for mothers and fathers engaged in work travel who are professionals, executives, and managers. Work-related travel has become more prevalent

since the early 2000's due to the changing global economy (Jeong et al. 2013). For many of today's workers, work means travel, and over the last decade, jobs requiring overnight work travel have increased, and the type of worker who is affected by travel has broadened (Casinowsky 2013). Generally, knowing what impacts working mothers and fathers the most, is important when considering overnight travel because of the increasing rates of those who are engaged in such travel. This study found that work travel was important, but only for sleep problems, and it mattered for mothers only, not fathers. The findings also indicate that work travel may not be as bad as previously thought and has few impacts on parents who professionals, executives, and managers. Mothers and fathers may adapt and manage their busy schedules despite work travel.

The findings showed that traveling for work had no impact on the mental and perceived health of working parents who are professionals, executives, and managers. This means that traveling for work does not appear to affect mothers and fathers as previously believed. However, it is possible different patterns have emerged if the sample contained more respondents who traveled frequently for work. A different story emerged about the sleep problems associated with work travel among mothers. Mothers who travel should take caution to ensure their sleep is not negatively impacted by getting more sleep and trying to follow a similar sleep schedule while traveling. Prioritizing sleep may also make them more productive when they return home to their family responsibilities.

Limitations and Future Research

There are some limitations of this research that should be taken into consideration. First, the dataset for this research was cross-sectional. Using a longitudinal sample may show different results for work travel, particularly as it relates to perceived health. Second, the type

of respondents who were included in the study were a specific group with unique experiences, and future research would benefit from considering a wider range of mothers and fathers. This could be accomplished by possibly examining a different subset of working parents that travel for different reasons such as traveling to meet customers, attend meetings, and participate in conferences (Gustafson 2006). The reasoning behind looking at a different sample of working parents would be to examine those that may not have the resources to cope with traveling for work, but because of the job requirement, must travel for work anyway. Third, this data is from 2008, and more recent data may reflect different results in how work travel impacts mothers and fathers.

Future research should examine other factors that could impact mothers and fathers who travel overnight for work. This study utilized quantitative data, which is helpful in making educated generalizations, but future research could use a mixed-methods approach with qualitative work leading to understanding what impacts mothers and fathers by interviewing those who travel for work. Conducting interviews with mothers and fathers who travel overnight for work, will give insight and a more personal look at what impacts parents when engaging in such travel. Interviews with parents will provide first-hand accounts of what they deal with when traveling for work.

Future research should look more in-depth into the specific types of work travel mothers and fathers are engaging in. This current thesis only looks at the amount of work travel, but did not give any detail of why the work travel was occurring or what type of arrangements parents were making while they are gone to ensure their children are cared for. By examining what occupations leads to the greatest occurrence of work travel, researchers could better understand how it impacts mothers and fathers. Other future research could also

include what lead the mothers and the fathers in the sample to engage in an occupation that requires work travel, and possibly the duration of time spent in that occupation. This could lead to a better understanding of any burnout rates caused by traveling for work more frequently, and if burnout affects mothers or fathers more.

Summary

Guided by role conflict theory, this thesis examined the impacts of overnight work-related travel on mothers and fathers, and how it related to a variety of outcomes, including psychological distress, sleep problems, and perceived overall health. The findings from this study suggest that the psychological distress and health of mothers and fathers who are professionals, executives, and managers, is not impacted by work travel. The findings do show that work travel is positively related to sleep problems of mothers in this study, but not fathers. This study adds to the literature on about the impacts of overnight work travel on mothers and fathers, who are professionals, executives, and managers, filling gaps in existing literature. It extends the understanding of overnight work travel by examining different variables and how that impacts the subset of mothers and fathers.

REFERENCES

- Akdemir, Ilyas, Gokhan Altunbas, Suleyman Ercan, Selve Arslan, and Vedat Davutoglu. 2013. "Impact of Acute Sleep Deprivation on Aortic Elastic Properties in Healthy Workers." *Turkish Journal of Medical Sciences* 43(2):279-282.
- Allen, Tammy, and Kaitlin Kiburz. 2012. "Trait Mindfulness and Work–Family Balance among Working Parents: The Mediating Effects of Vitality and Sleep Quality." *Journal of Vocational Behavior* 80(2):372-379.
- American Sleep Association. 2018. "What is Sleep: A Dynamic Activity." Retrieved from (<https://www.sleepassociation.org/patients-general-public/what-is-sleep/>).
- Ammons, Samantha. 2013. "Work-Family Boundary Strategies: Stability and Alignment between Preferred and Enacted Boundaries." *Journal of Vocational Behavior* 82(1):49-58.
- Appelrouth, Scott, and Laura Desfor Edles. 2011. *Sociological Theory in the Contemporary Era 2nd Edition*. Thousand Oaks, CA: Sage.
- Bialik, Kristen. 2017. "6 Facts about U.S. Mothers." *Pew Research Center*. Retrieved from (<https://www.pewresearch.org>).
- Casinowsky, Gunilla. 2013. "Working Life on the Move, Domestic Life at Standstill? Work Related Travel and Responsibility for Home and Family." *Gender, Work and Organization* 20(3):311-326.
- Centers for Disease Control and Prevention. 2014. *Sleep and Sleep Disorders*. Retrieved from (<https://www.cdc.gov/sleep/index.html>).

Centers for Disease Control and Prevention, Epidemiology Program Office 2011.

“Unhealthy Sleep-Related Behaviors — 12 states, 2009.” *Morbidity and Mortality Weekly Report*. 60(8). Retrieved from
(<http://www.cdc.gov/mmwr/PDF/wk/mm6008.pdf>).

Chiang, Evelyn, John Baley, Joy Ponder, and Miguel A. Padilla. 2016. "Autonomy and Firefighting: Perceived Competence and Stress." *Journal of Occupational & Environmental Medicine* 58(11):1223.

Chung-Yan, Greg A. 2010. "The Nonlinear Effects of Job Complexity and Autonomy on Job Satisfaction, Turnover, and Psychological Well-being." *Journal of Occupational Health Psychology* 15(3):237-251.

Coverman, Shelley. 1989. "Role Overload, Role Conflict, and Stress: Addressing Consequences of Multiple Role Demands." *Social Forces* 67(4):965-982.

Dimberg, L. A., J. Striker, C. Nordanlycke-Yoo, L. Nagy, K.A. Mundt, and S.I. Sulsky. 2002. "Mental Health Insurance Claims among Spouses of Frequent Business Travellers." *Occupational and Environmental Medicine* 59(3):175-181.

Espino, C. M., S.M. Sundstrom, H.L. Frick, M. Jacobs, and M. Peters. 2002. "International Business Travel: Impact on Families and Travellers." *Occupational and Environmental Medicine* 59(5):309-322.

Ettner, Susan L. 1996. "New evidence on the relationship between income and health." *Journal of Health and Economics* 15:67-85.

Fine-Davis, Margaret, Jeanne Fagnani, Dino Giovannini, Lis Hojgaard, and Hilary Clarke. 2004. *Fathers and Mothers: Dilemmas of the Work-Life Balance*, A

- Comparative Study in Four European Countries*. Springer Netherlands.
- Global Business Travel Association. 2017. "Travel Trends Index: Domestic, Leisure, and Business Travel Continue to Thrive." Retrieved from (<https://gbta.org>).
- Gray, Peter B. and Kermyt G. Anderson. 2010. *Fatherhood: Evolution and Human Paternal Behavior*. Cambridge, Massachusetts: Harvard University Press.
- Greenhaus, Jeffrey H., and Nicholas J. Beutell. 1985. "Interrole Conflict among Married Women: The Influence of Husband and Wife characteristics on Conflict and Coping Behavior." *Journal of Vocational Behavior* 21: 99-110.
- Grice, Mira M., Denise Feda, Patricia McGovern, Bruce H. Alexander, David McCaffrey, and Laurie Ukestad. 2007. "Giving Birth and Returning to Work: The Impact of Work–Family Conflict on Women’s Health After Childbirth." *Annals of Epidemiology* 17(10):791-798.
- Grzywacz, Joseph G., Dawn Carlson, and Sandee Shulkin. 2008. "Schedule Flexibility and Stress: Linking Formal Flexible Arrangements and Perceived Flexibility to Employee Health." *Community, Work & Family* 11(2):199-214.
- Gustafson, Per. 2006. "Work-Related Travel, Gender and Family Obligations." *Work, Employment and Society* 20(3):513-530.
- Hammond, Ron, Paul Cheney, and Raewyn Pearsey. 2015. *Introduction to Sociology Textbook*. Retrieved from (<http://www.freesociologybooks.com>).
- Hughes, Michael, and Carolyn Kroehler. 2012. *Sociology: The Core 11th Edition*. McGraw-Hill Higher Education. New York, NY.
- Hyde, Janet Shibley, Marjorie H. Klein, Marilyn J. Essex, and Roseanne Clark. 1995. "Maternity Leave and Women’s Mental Health." *Psychology of Women*

- Quarterly* 19:257-285.
- Ivey, Allen E., and Stanley S. Robin. 1966. "Role Theory, Role Conflict, and Counseling: A Conceptual Framework" *Journal of Counseling Psychology*. 13(1):29-37.
- Jeong, Yu-Jin, Anisa Zvonkovic, Yoshie Sano, and Alan Acock. 2013. "The Occurrence and Frequency of Overnight Job Travel in the USA." *Work, Employment and Society* 27(1):138-152.
- Kahn, Robert, Donald M. Wolfe, Robert P. Quinn, J. Diedrick Snoek, and Robert A. Rosentbal. 1964. *Organizational Stress: Studies in Role Conflict and Ambiguity*. New York: Wiley.
- Kessler, Ronald C., and Harold Neighbors. 1986. "A New Perspective on the Relationships among Race, Social Class, and Psychological Distress." *Journal of Health and Social Behavior* 27(2):107-15.
- Klein, Marjorie H., Janet Shibley Hyde, Marilyn J. Essex, and Roseanne Clark. 1998. "Maternity Leave, Role Quality, Work Involvement, and Mental health One Year after Delivery." *Psychology of Women Quarterly* 22:239-266.
- Lee, NaYeon, Anisa Zvonkovic, and Duane Crawford. 2014. "The Impact of Work Family Conflict and Facilitation on Women's Perceptions of Role Balance." *Journal of Family Issues* 35(9):1252-1274.
- Madsen, Susan R., and Scott C. Hammond. 2005. "The Complexification of Work Family Conflict Theory: A Critical Analysis." *Journal of Critical Postmodern Organization Science* 4(4.2):151-179.
- Mailey, Emily, Jennifer Huberty, Danae Dinkel, and Edward McAuley. 2014. "Physical

- Activity Barriers and Facilitators among Working Mothers and Fathers." *BMC Public Health* 14(1):657.
- Mandemakers, Jornt , and Christiaan W. S. Monden. 2010. "Does Education Buffer the Impact of Disability on Psychological Distress?" *Social Science & Medicine* (1982.Print) 71(2):288-297.
- McGill, Brittany. 2014. "Navigating New Norms of Involved Fatherhood." *Journal of Family Issues* 35(8):1089-1106.
- Meltzer, Lisa, and Jodi Mindell. 2007. "Relationship between Child Sleep Disturbances and Maternal Sleep, Mood, and Parenting Stress: A Pilot Study." *Journal of Family Psychology* 21(1):67-73.
- National Study of Changing Work Force. 2008. "2008 Questionnaire." Families and Work Institute.
- National Study of Changing Work Force. 2011. "Guide to Public-Use Files."
- Offer, Shira. 2014. "The Costs of Thinking About Work and Family: Mental Labor, Work Family Spillover, and Gender Inequality Among Parents in Dual-Earner Families." *Sociological Forum* 29(4):916-936.
- Offer, Shira, and Barbara Schneider. 2011. "Revisiting the Gender Gap in Time-use Patterns." *American Sociological Review* 76(6):809-833.
- Parker, Kim, and Gretchen Livingston. 2017. "6 Facts about American Fathers." *Pew Research Center*. Retrieved from (<https://www.pewsocialtrends.org>).
- Parker, Kim, and Wendy Wang. 2013a. "How Mothers and Fathers Spend Their Time." *Pew Research Center*. Retrieved from (<https://www.pewsocialtrends.org>).
- Parker, Kim, and Wendy Wang. 2013b. "Modern Parenthood." *Pew Research Center*.

- Retrieved from (<https://www.pewsocialtrends.org>).
- Parsons, Talcott C., and Edward A. Shils. 1951/2001. *Toward a General Theory of Action, Introduction by Neil Smelser*. New Brunswick, NJ: Transaction Publishers
- Perry-Jenkins, Maureen, JuliAnna Z. Smith, Abbie E. Goldberg, and Jade Logan. 2011. "Working-Class Jobs and New Parents' Mental Health." *Journal of Marriage and Family* 73:1117-1132.
- Piotrkowski, C. 1979. *Work and the Family System*. New York: Free Press.
- Presser, Harriet B., and Joan Hermsen. 1996. "Study Looks at Gender Differences in Travel." *Hotel & Motel Management* 211(5):18.
- Rothbard, Nancy P. 2001. "Enriching or Depleting? The Dynamics of Engagement in Work and Family Roles." *Administrative Science Quarterly* (46)655–684.^[1]_{SEP}
- Schlarb, Angelika, Dorota Reis, and Annette Schröder. 2012. "Sleep Characteristics, Sleep Problems, and Associations to Quality of Life among Psychotherapists." *Sleep Disorders* 2012(1):1-7.
- Shepherd Banigan, Megan, Janice Bell, Anirban Basu, Cathryn Booth LaForce, and Jeffrey Harris. 2016. "Workplace Stress and Working from Home Influence Depressive Symptoms among Employed Women with Young Children." *International Journal of Behavioral Medicine* 23(1):102-111.
- Swenson, Andrea R., and Anisa Zvonkovic. 2016. "Navigating Mothering: A Feminist Analysis of Frequent Work Travel and Independence in Families." *Sex Roles* 74(11-12):543-557.
- Thomson, Elizabeth, and S. S. McLanahan. 2012. "Reflections on "Family Structure and

- Child Well-being: Economic Resources Vs. Parental Socialization." *Social Forces* 91(1):45-53.
- Usdansky, Margaret L., Rachel A. Gordon, Xue Wang, and Anna Gluzman. 2012. "Depression Risk among Mothers of Young Children: The Role of Employment Preferences, Labor Force Status and Job Quality." *Journal of Family and Economic Issue* 33(1): 83-94.
- U.S. Department of Labor. 2016. "Employment Characteristics of Families-2016." Retrieved from (<https://www.bls.gov/news.release/pdf/famee.pdf>).
- U.S. Department of Transportation. 2015. "Passenger Travel Facts and Figures 2015" Retrieved from (www.rita.dot.gov/bts/publications/passenger_travel_2015/chapter2/fig2_3).
- U.S. Travel Association. 2017. "Travel Trends Index: Domestic Leisure and Business Travel Continue to Thrive." Retrieved from (<https://www.ustravel.org>).
- Voydanoff, Patricia. 2005. "Work Demands and Work-to-Family and Family-to-Work Conflict." *Journal of Family Issues* 26(6):707-726.
- Wang, Wendy. 2013. "The "Leisure Gap" Between Mothers and Fathers." *Pew Research Center*. Retrieved from (<https://www.pewsocialtrends.org>).
- Williams, David, Risa Lavizzo-Mourey, and Rueben C. Warren. 1994. "The Concept of Race and Health Status in America." *Public Health Reports* 109(1):26-41.
- Zvonkovic, Anisa, Kathleen Greaves, Cynthia Schmiede, and Leslie Hall. 1996. "The Marital Construction of Gender through Work and Family Decisions: A Qualitative Analysis." *Journal of Marriage and Family* 58(1):91-100.
- Zvonkovic, Anisa M., Andrea V. Swenson and Zoë Cornwell. 2017. "Children's

Experiences of Time when a Parent Travels for Work." *Journal of Marriage and Family* 79(4):983-1000.