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Predictors of Fraudulent Monday Effect Workers Compensation Claims Filing

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PREDICTORS OF FRAUDULENT MONDAY EFFECT WORKERS COMPENSATION CLAIMS FILING

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by

Sharla St. Rose

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To: Interim Dean William Hardin
College of Business

This dissertation, written by Sharla St. Rose, and entitled Predictors of Fraudulent Monday Effect Workers Compensation Claims Filing, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

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Date of Defense: May 21, 2021

The dissertation of Sharla St. Rose is approved.

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and Dean of the University Graduate School

Florida International University, 2021

DEDICATION

I dedicate this body of work to my husband, Peter, and my children, Tayla, Maya, Sean, and Alex, who constantly challenge me to be and do better. You are my everything.

Also, to my parents, who have always provided the net that gives me the courage to jump.

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ABSTRACT OF THE DISSERTATION

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by

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Professor George Marakas, Major Professor

Monday Effect Claims refer to workers compensation claims filed on Mondays for easy to conceal injuries such as strains, sprains, and back injuries. Researchers and industry experts have long believed that there is an element of fraud in these claims, resulting from individuals who were injured during the weekend, while not at work, looking to take advantage of the medical benefits available through workers compensation insurance. Fraudulent Monday Effect Claims (FMEC), as presented in this study, specifically refer to workers compensation claims filed for injuries that occurred while an individual was not at work, presumably during the weekend.

A study of 507 adult survey participants examines how injury type, level of financial exposure, as determined by medical and accident insurance coverage status, along with an individual's job satisfaction level and acceptance of fraud, can predict the extent to which an individual would be likely to file a Fraudulent Monday Effect Claim (FMEC). The findings of this research indicate that while injury type and level of fraud acceptance may predict the likelihood of a Fraudulent Monday Effect Claim filing, financial exposure and job satisfaction may not.

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ABBREVIATIONS AND ACRONYMS

HMO	Health Maintenance Organization
POS	Point of Service
PPO	Preferred Provider Organization
FMEC	Fraudulent Monday Effect Claim
HDHP	High Deductible Health Plan
ITS	Injury Type in Scenario
ITP	Participant Perception of Injury Type
FES	Financial Exposure in Scenario
FEP	Participant Perception of Financial Exposure
FAS	Fraud Acceptability Score
JSAT	Job Satisfaction

CHAPTER I

INTRODUCTION

Background

Workers compensation insurance provides medical treatment and salary replacement benefits to workers who become ill or injured as a result of their employment actives. Workers compensation also provides death benefits to employees who die as a result of a job-related injury or illness (Guyton, 1999). Referred to as the "grand bargain", workers compensation provides employees with these benefits regardless of who is at fault while employers receive protection from lawsuits (Szymendera, 2020).

Employers pay the full cost of workers compensation insurance, except in three states where employees also contribute. Some employers may elect to self-insure the risk while other employers, typically smaller, will contract with insurance companies or available state plans. When obtaining coverage from an insurance carrier, workers compensation insurance premiums are calculated based on the amount of covered earnings and the Experience Modification Factor, often referred to as the "mod factor" (Clayton, 2016). The Experience Modification factor weighs the frequency of claims, and considers the severity of workplace accidents, but to a lesser degree than frequency. In 2018, $62.9 billion of workers compensation benefits were paid which represented $0.77 per $100 of covered wages in the same year, employers paid approximately $98.6 billion dollars to cover the cost of benefits, representing $1.21 per $100 of covered (National Academy of Social Insurance, 2020).

Workers compensation insurance premiums and claims cost can represent a significant portion of a company's operating budget. Employees can also be impacted by high workers compensation claims. According to Szymendera (2020), while workers may not pay for workers compensation directly, employers who facing high workers compensation costs may shift some of the cost to employees in the form of lower wages. Additionally, high workers compensation cost may limit the amount of money an employer contributes towards other benefits, such as medical insurance and retirement accounts.

Given the impact of high workers compensation liability, employers are constantly seeking ways to limit their premium liability by reducing the frequency of claims for workplace injuries. In addition to implementing workplace safety programs, another way to reduce workers compensation claims costs is to reduce the number of fraudulent claims (Cooper et al., 2020).

Purpose and Objectives

A 2015 study by Employers Holdings, a publicly traded company that provides workers compensation coverage to small employers, found that 13 of the 100 employers surveyed were concerned that their workers faked work-related injuries in order to get workers compensation benefits (Employers Survey, 2015). This concern proves to be justified based on the findings of the Insurance Research Council's Public Attitude Monitor which stated that 8.3% of the general public believed that it was acceptable for someone who was injured at home to claim the injury as work-related in order to get workers compensation benefits (Derrig & Kraus, 1994).

The term “Monday Effect”, derived from Robert Smith’s 1989 study, refers to Workers Compensation claims filed on Mondays for “easy to conceal” injuries, such as strains, sprains, and back injuries. Smith, along with others (Butler et al., 2014; Campolieti & Hyatt, 2006; Card & McCall, 1996), found that claims for easy to conceal of injuries were reported at a higher rate on Mondays than on other days of the work week. Smith asserted that Monday Effect Claims were more likely to be falsely reported than other types of claims and were likely a result of employees getting injured on weekends and reporting the injury as work-related upon returning to work Monday. Smith’s study relied on workers compensation injury claims data from 1978 and 1979 in four (4) states. The data set included the type of injury as well as the date, day, and time the injury was reported. He concluded that 4% of reported claims for strains and sprains were likely to be fraudulent, along with 1% of fracture claims, amounting to 2% of the most commonly filed claims (Smith, 1989). While 2% may represent a small number, when considering the total cost of workers compensation claims and benefits, $62.9 billion in 2018 (National Academy of Social Insurance, 2020), a 2% decrease in claims cost could provide significant cost savings to employers.

In an effort to assist employers in establishing guidelines and procedures that can be used to reduce their workers compensation liability by reducing the number Fraudulent Monday Effect Claims, this study aims answer the following question: How do various factors, specifically, injury type, medical insurance coverage, accident insurance coverage, acceptability of fraud, and job satisfaction, predict the likelihood that an individual will elect to file a Fraudulent Monday Effect Claim?

By understanding the drivers of fraudulent activity in workers compensation, employers can implement effective strategies to mitigate their financial exposure resulting from preventable claims activity (Cooper et al., 2020).

Theoretical Framework

Critical to discussions regarding insurance is the theory of moral hazard. Moral hazard dictates that when individuals are exposed to risk or a potential loss, their actions may change depending on whether the that particular risk is insured. According to Georges and St-Michel (1991) ex ante moral hazard describes potential changes in an individual's behavior which may increase the likelihood of a loss occurring, which may not have occurred if protection or insurance from said loss was not available. For example, an insured individual may be more likely to participate in risky behavior (participating in a dangerous sport), knowing that if a loss were to occur (a broken leg) the resulting financial loss (payment for medical treatment) would be mitigated or even erased with benefits payable from a health insurance policy.

Pertinent to this study, however, ex post moral hazard speaks to the actions that an individual may take after a loss has occurred (Martinon et al., 2018). Götze and Gürtler (2020), refer to these actions as "loss adjustment activities". With ex post moral hazard, an individual who suffers a loss may take certain actions to mitigate the loss (Guo & Burton, 2012). For example, an individual who suffers a loss (broken leg) but does not have a way to mitigate the loss resulting from the broken leg (medical insurance to cover the cost of care) may take certain actions (file a fraudulent workers compensation claim) in order to cover the cost of getting medical treatment. This kind of situation is able to occur due to the asymmetry of information between the individual and the insurance

company (Stripling et al., 2018; Götze & Gürtler, 2020). In an ex post situation, the insurance company does not know when the actual loss occurred, and must rely on the individual claim filer to provide this information. This imbalance offers individuals the opportunity cover losses that may not others wise be insurable.

This study explores the situation in which ex post moral hazard occurs, the impact it has on fraudulent workers compensation filing, specifically the filing of Fraudulent Monday Effect Claims (FMEC), and the factors that influences an individual's actions.

CHAPTER II

LITERATURE REVIEW

Workers Compensation Insurance

Workers compensation laws in the United States were first implemented by states in the late nineteenth century and early twentieth century. The primary objective of workers compensation laws was to provide benefits to workers who suffered bodily injury while working, while protecting employers from liability (Clayton, 2003). Although Germany and England are credited with the invention of modern workers compensation laws, payments by employers to injured workers date back to ancient times (Guyton, 1999). There is evidence that ancient civilizations, such as the Sumeria, Romans and Greeks, had systems in place for compensating workers who sustained injuries.

The early modern forms of workers compensation laws in America allowed workers to sue their employer in order to obtain benefits after suffering a work-related injury. However, when injured, the employee was responsible for proving that the employer had been negligent and had failed to take the necessary precautions to protect the employee (Fishback & Kantor, 1998). Additionally, employers were provided with significant tort protection in what has been called “employer defenses” or “unholy trinity of defenses” (Murray, 2007; Guyton, 1999; Go, 1996). Employers were able to escape liability by relying on one of the following defenses (Fishback & Kantor, 1998). The “assumption of risk defense” stated that the employer should not be held liable because the employee willingly accepted the employment and the associated risk. The fellow servant defense placed the blame of the accident on the employee. The contributory negligence defense stated the injured employee was either fully or partially responsible

for the accident due to his or her own negligence. These rules served as the guiding principles which determined whether an employer was required to make payment to the employee.

By the early part of the Industrial Revolution, the earlier structures of recompenses had given way to a version of workers compensation similar to what we see today. In 1902, Maryland enacted the first limited workers compensation laws followed by Montana in 1909 (Szymendera, 2020). The laws are considered limited because they only covered specific workers. In Maryland street and steam railway workers, miners, and those working on municipal public works project were covered. In Montana, only miners were covered. In 1910, New York passed the first state workers compensation laws and by 1911, 21 other stated had enacted similar laws.

According to Fishback and Kantor (1998) by the time the first workers compensation laws were passed, the various stakeholder groups, employers, insurance companies and workers, all anticipated gains from the new laws. Workers benefited in the form of higher payouts in the event of a work-related injury or death, as well as not having to bear the burden of proving the employer's responsibility. Employers also gained by being able to stabilize the costs of having to pay for work-related accidents; workers compensation allowed them to remove a level of uncertainty by allowing for predictable costs. Additionally, in some cases, employers were able to pass on a significant amount of cost on to employees in the form of lower wages (Szymendera, 2020).

Throughout the 1950s and 1960s, state workers compensation laws failed at providing adequate protections for injured workers. During this period, many states did

not require employers to provide coverage and where coverage was mandated, the levels of coverage were woefully inadequate. During the 1970s the federal government recognized the need for more protections for employees. In an effort to improve the situation for workers, Congress enacted the Occupational Safety and Health Act of 1970 which called for a review of state policies (Boden, 2020). This review and the subsequent findings resulted in significant changes in the way states handled workers compensation which subsequently led to more protection for workers.

However, while workers enjoyed more protections, these changes led to increased cost for employers and decreased profitability for insurers. Providing medical benefits under workers compensation posed a unique challenge to insurers and employers. Since workers are not responsible for costs of obtaining medical care needed as a result of a work-related accident, managing the costs, and ensuring that injured employees only received medical care that is necessary proved to be difficult. This continues to be an ongoing challenge (Szymendera, 2020).

To counteract the effects of the earlier legislations which made it easier for employees to obtain benefits, employers and insurers concentrated their efforts on changing rules to decrease their liability and therefore, cost. Many of the changes which were implemented were successful at reducing employer cost but did so at the expense of injured workers. In many cases, the updated state laws reduced cost by making it harder for injured workers to get benefits or by decreasing the level of benefits to which an injured worker was entitled (Boden, 2020; Stripling et al., 2018). For example, some states, such as California, used more stringent definitions of disability which reduced the likelihood that an employee would be deemed disabled and therefore, eligible to receive

benefits. Even with significant protections for employers, in some cases, based on the nature and location of the injury, employers may still be at a disadvantage due to the existence of moral hazard (Bolduc et al., 1991; Georges & St-Michel, 1991).

Moral Hazard and Workers Compensation

When evaluating workers compensation claims, insurance companies and employers do not always have full or accurate information about the cause or nature of the injury and this contributes to multiple forms of moral hazard (Bolduc et al., 1991; Georges & St-Michel, 1991). The two main categories of moral hazard are ante moral hazard and ex post moral hazard. The former relates to activities which affect the possibilities of an injury occurring and the latter to actions taken once an injury occurs (Georges & St-Michel, 1991). Guo and Burton, Jr. (2010) later identified two different types of ex post moral that may occur when workers are covered by workers compensation insurance. Firstly, workers may be more likely to file claims for injuries that they may not typically report if receiving benefits through workers compensation was not an option. Secondly, the duration of an injury and therefore the benefit period may be extended. This study focuses on ex post moral hazard and will examine whether having, or not having, medical and or accident coverage is likely to impact the likelihood that an individual will file a Fraudulent Monday Effect Claim once an injury has occurred.

Georges and St-Michel (1991) attempted to quantify moral hazard relating to workers compensation claims filings and found that for difficult to diagnose injuries such as back and muscle related injuries, the less accurate information an insurer has about an injury, the higher the level of moral hazard. For such injuries it is very difficult for

insurers to know the actual day and time that the injury initially occurred and the conditions under which the injury occurred. Unlike other types of work-related injuries, such as lacerations and fractures, it is possible for an employee who was injured over the weekend, while they were not at work, to postpone treatment for the injury until they arrive at work on Monday. According to Stripling et al. (2018), the existence of moral hazard, caused by the asymmetry in information between the claimant and the insurance companies, creates an environment for fraud.

Researchers have posited that the rich medical benefits provided by workers compensation insurance is one of the drivers of fraudulent behavior among employees (Bronchetti & McInerney, 2017). While the number of employers who offer medical insurance to employees have increased over the years, there are still a significant number of individuals who do not have medical insurance or whose medical plans do not provide adequate benefits. These employees may rely on employers to cover a large portion of the cost of care by filing fraudulent workers compensation claims (Dillinder, 2015). Furthermore, some in the insurance industry have suggested that in addition to medical insurance, offering employees access to accident insurance can help provide them with the means to cover out of pocket medical costs so that they do not have to rely on workers compensation (Naumann, 2015).

Medical Insurance

In 1912, after successfully advocating for better benefits for workers in the match industry, and after seeing the increasing adoption of state workers compensation programs, The American Association of Labor Legislation, along with their Progressive allies, turned their attention to health insurance (Murray, 2007). By this time, there

already the recognition that more had to be done to manage the rising cost of healthcare and employers had begun to take action to reduce costs. In in some cases, employers entered into contracts with medical service providers to access bulk discounts, and in other cases some employers hide medical providers on staff (Light, 2004).

After several years of attempting to get various states to pass legislation to create a health insurance program, the efforts of the American Association of Labor Legislation and their allies proved to be unsuccessful, for they failed to convinced legislatures, labor unions, physicians, and workers of the need for such programs. Arguments against a government legislated program included a lack of sound actuarial foundation as well as the potential impact of moral hazard. It was thought that with a state ran program, individuals would be more likely to malinger (Murray 2007) which would undermine the financial health of the program. Looking back on the failed initial attempts, researchers have cited the lack of belief in the efficacy of medicine as one of the key reasons that voters seemed apathetic to establishing this new system.

Throughout the 1930s and 1940s, there was growing interest in medical insurance, brought about increases in the cost of obtaining healthcare (Lee, 2015; Light, 2011). Although both President Roosevelt and President Truman showed interest in legislation that would allow for more affordable, organizations such as the American Medical Association, continued to denounce any form of government intervention (Lee, 2015; Quadagno, 2004). While Roosevelt's goal was providing coverage for the poor, Truman showed strong support for a nationalized system (Lee, 2015).

In Truman's system, all Americans would have access to healthcare through a universal health insurance structure (Lee, 2015; Fronstin, 2001). However, despite the

support of President Truman, those who were against the concept of nationalized medical system were successful at preventing any legislative actions from occurring. In an environment of growing anti-communism, they spent significant resources to link a nationalized healthcare system to socialism, which would negatively impact both doctors and patients (Lee, 2015). In the coming decades, up to the present time, there would be several attempts at reforming the healthcare system in order to broaden access to coverage (Light, 2011).

As support for a national program waned, private health insurance programs continued to emerge as the solution for providing access greater to healthcare. The American Hospital Associations started by offering insurance programs that covered hospital related costs. Policyholders would pay a monthly premium in return for accessing free care when needed and the plan would pay the hospital. This programs eventually became the Blue Cross plans (Light, 2004; Quadagno, 2004). Although it initially opposed to such programs, the American Medical Association soon followed with the Blue Shield plans which provided coverage for physician related services. Unlike the earlier versions of health insurance which saw providers receiving very little of the financial benefits, the Blue Cross and Blue Shield programs were structured so that medical service providers and hospitals were fairly compensated through the insurance scheme (Light, 2004; Quadagno, 2004). Blue Cross and Blue Shield would eventually merge in the early 1980s. The success of the Blue Cross and Blue Shield programs, led to a proliferation of new private health insurance companies. While the Blues, as there are called, were originally formed as non-for-profit organizations, these new organizations

were strictly for profit which enabled them to employ underwriting methods that better managed their risks (Light, 2004).

As previously discussed, employers have always played a role in the acquisition and dissemination of health care services, from the medical coverage required by workers compensation laws to the contracting of provider services on behalf of their employees. After World War II, left without the option of increasing wages, employers used medical insurance as a way to attract and retain employees (Fronstin, 2001). By the mid-1940s, the National War Labor Board ruled that employer payments towards employee medical insurance premiums were not to be treated as wages and the Internal Revenue Service subsequently explicitly exempted said payments from taxes (Fronstin, 2001; Chivers et al., 2017; Feng & Zhao, 2017). This tax benefit that is still in place today.

As the cost of health care rose, so did the cost of health insurance. Increases in healthcare costs were tied to technological improvements which were more costly, as well as an aging population who required more care and treatment. The increase in health cost has consistently surpassed that of inflation (Fonstrin, 2001). Moving from the existing fee for service model, the industry adopted Health Maintenance Organizations (HMOs) with the hopes that a more closely managed program would impact both employee utilization as well as the overall cost of providing coverage. Managed care programs took different shapes. In addition to HMOs, there were Point of Service (POS) and Preferred Provider Organizations (PPO). The difference between plans were based on the which providers employees could see, whether they needed permission to see the provider, and how much they would be required to pay, both in premiums and when they had to utilize the health care system.

Unlike other western nations that provide some level of government sponsored health care, America continues to base its system of health insurance coverage on employment. The favorable tax treatment of health insurance expenditure created a favorable environment in which an employer-based system can persist (Feng & Zhao, 2017). To date, the majority of working age Americans still receive health insurance through their employers (Chivers et al., 2017; Feng & Zhao, 2017). However, like the challenges that exist with workers compensation insurance, employers are tasked with managing the rising cost of maintaining health insurance for their employees, while still providing adequate coverage.

Even when covered by an employer sponsored medical plan, employees are often faced with substantial out of pocket costs when accessing medical care. As the cost of health care and health insurance continue to rise, employers have had to shift costs to employees, either in the form of higher premiums or by offering lower premium plans that require employees to pay a higher cost share when utilizing their health insurance plan to access medical treatment. Most medical insurance plans require employees to pay for a portion of care and treatment in the form of copays, coinsurance, and deductibles. A copay is a fixed amount an employee must pay when accessing care, usually for physician visits or for obtaining prescriptions. Coinsurance is the percentage of the cost of coverage that the employee is responsible for. A deductible is the fixed sum of money an insured must pay before the insurance plan will contribute towards the cost of care. A medical insurance plan will typically include all three types of cost shares.

According to the 2019 Kaiser Family Survey, 80% of employees were enrolled in a plan with a deductible (Claxton et al., 2019). The same study reported that between

2014 and 2019, the average deductible for an employee who is enrolled in employee only coverage and only utilizes providers who are part of their insurance carrier's network increased by 35% from $1,217 in 2014 to $1,655 in 2019 (Claxton et al., 2019). Such high out of pocket costs often represent a financial burden for employees who may not readily have funds to cover these expenses.

Employees who are faced with medical debt are forced to contend with serious negative ramifications including relying on payday loans and filing for bankruptcy. Bickham and Lim (2014) found that the increase in payday loan debt observed was linked to the increase medical debt. Additionally, without access to funds to cover their medical plan's deductible, employees may elect to forgo the care they need (Baker-Goering, 2019; Haviland et al., 2016) which may lead to the worsening of health issues which will result in even higher costs for both the employee and their employer (Gibson, 2013). The prospect of facing such difficult financial situations may induce employees who need to seek medical treatment to find other ways to cover the expenses related to obtaining care.

According to Robert Smith (1989) some employees may elect to rely on workers compensation to cover medical treatment cost that would otherwise be covered by medical insurance. Workers compensation provides medical treatment and salary replacement benefits to workers who become ill or injured as a result of their employment actives. In contrast to most employer sponsored health insurance programs, which have large deductibles and require employees to pay a significant sum of money before the insurance company will cover any cost, workers compensation covers the full cost of medical care.

Accident Insurance

Understanding that the current structure of medical insurance can still leave many individuals with large out-of-pocket costs, insurers, and employers alike, continue to offer access to additional benefits which can help employees minimize their out-of-pocket cost. Once such plan is an accident insurance plan.

The first accident insurance policies were offered in the late 19th century to provide injured workers with benefits. These benefits eventually gave way to what is now workers compensations insurance which provides both medical coverage and salary replacement benefits.

The modern version of accident insurance likely spawned out of the individual Accidental Death coverage which companies such as Mutual Accident Company offered. Mutual Accident Company, later became Colonial Life & Accident Insurance Company, was founded in 1937 in Columbia, South Carolina by Edwin F. Averyt and J. Clifton Judy (Colonial Life's history, 2020). These benefits were originally offered directly to individuals who paid premiums directly to the insurance company. In 1955, Colonial began offering the plans through employers who would deduct the premiums from employees' paychecks. That same year, 1955, American Family Life Insurance Company of Columbus, which later became known as Aflac, was founded by Paul and Bill Amos in Columbus, Georgia (Aflac, 2020). The company initially offered life insurance policies, but in 1958 started offering cancer policies which provided cash benefits who were diagnosed and treated with cancer. By 1964, Aflac recognized the importance of offering their diversifying the ways in which its policies were sold and started offering its benefits

through employers. After launching other policies in America and Japan, Aflac eventually created its version of accident insurance and offered its first policy in 1983.

Over the years, both companies have made improvements to their accident policies to make them more beneficial to employees. Aflac has consistently and continue to be the top to insurance carriers for accident insurance. In addition to accident insurance, both insurers, along with many others who have since entered the voluntary benefits market, offer other insurance plans including critical, and hospital indemnity insurance. Both Aflac and Colonial have been consistently ranked in the top three voluntary benefits carriers in terms of market share, with Aflac first with 19% of the market shares and Colonial third with 7% (Brazzell & Rockwell, 2019).

The current version of accident insurance is of particular interest to this research due to the way it interacts with workers compensation. Accident insurance provides employees with cash benefits for the diagnosis and treatment of accidental injuries. Covered accidents include trip and falls, nonprofessional sporting accidents, common child injuries such as biking related accidents, and major accidents such as a car accident with serious injuries (Pantalone, 2008). Many plans also include an Accidental Death and Dismemberment benefits which pays a beneficiary a specified death benefit if the insured were to be killed as a result of a covered injury. While the plans will cover most injuries, there are some exclusions. For example, most plan will not cover intentional injuries or injuries that occur during the commission of a crime.

Some accident plans only cover non-occupational injuries, but others will cover both occupational and non-occupational injuries. When purchased through an employer sponsored program, the employer decides whether the offered coverage will include

coverage for occupational injuries. While there has been very little research about the impact of accident plans on workers compensation claims, a 2014 study commission by Aflac found that 40 of employers who implemented an accident plan saw a decrease in their workers compensation claims filing (Naumann, 2015). Studies such as the Aflac study, coupled with employer's desires to provide employees with benefit options that can cover out-of-pocket medical costs due to decreases in medical insurance coverage, have led to an increase in interest in accident insurance.

According to the 2018 Emerging Trends survey by Willis Towers Watsons, an employee benefits consulting firm, 80 of the 336 large employers who participated in the survey believed that voluntary benefit plans, such as accident insurance, were an important component of their benefit program (Willis Watson Towers, 2018). The same survey noted that while only 37% of surveyed employers currently offer accident insurance, that number is expected to increase to 58% by 2021. Employer interest in offering voluntary insurance to employees is driving increased interest among insurance carriers and many insurance carriers are beginning to recognize voluntary benefits as an important part of their revenue growth strategies. In 2016, insurers saw an 11% increase in written premium which was mostly driven by their voluntary insurance lines, compared to their core lines which saw a range of 1-3% increase (Roberts, 2017).

Most employer sponsored accident insurance plans are offered on a voluntary basis in which employees must actively elect the coverage. Employees are also responsible for paying the premium which are usually deducted from the employee's paycheck. Employers then remit payment to the insurance carrier on behalf of the employee. In many cases, accident plans are portable so that if an employee leaves the

employer for any reason, the employee can continue their coverage by paying premium directly to the insurance carrier. Allowing for payroll deductions of accident plans may improve the chances that individuals will maintain their coverage.

Features of an accident plan, such as cash benefits paid directly to the employee, can impact an individual's decision to rely on workers compensation. The cash benefit can be used to offset out-of-pocket costs resulting from accessing the medical system due to an injury. Additionally, since some accident plans provide coverage for job related injuries, even when there is no financial loss by the employee, there is the possibility that such plans may incent individuals to file a workers compensation claim.

Existence of Monday Effect Claims

As previously mentioned, states have the authority to implement regulations that affect various aspects of workers compensation benefits. Some regulations expand benefits for employees while other laws restrict benefits. States continually work with businesses and insurers to balance the needs of employees with that of the other stakeholders because their decisions have a direct impact on the overall cost of the program (Clark, Marlett, & Neal, 2016).

Benjamin Hansen's 2016 study examined whether California's 2004 workers compensation reform had an impact on the number and type of claims that were filed on Monday and found that reforms that decreased benefits and made it more difficult for employees to file claims led to fewer claims being filed as well as lower cost per claim (Hansen, 2016). The reform enacted several regulations that made it more difficult to file a fraudulent claim. For example, employers, rather than employees, were now able to

select the examining doctor. Other changes put more responsibility on the employee to file a successful workers compensation claim.

Although employers and insurers have very little say as to how the benefits are designed, and therefore, the costs associated with claims, one key way they can reduce cost is to identify and eliminate fraudulent claims.

While there have been several studies which have verified the existence of the phenomenon of the increased level workers compensation claims filing of easy to conceal injuries on Mondays, there has been inconclusive findings about the cause. Building on Robert Smith's seminal study, Card and McCall (1996) examined the existence and cause of Monday Effect using Workers Compensation claims data from Minnesota between 1998 and 1989. They tested the hypothesis that workers who did not have medical insurance would be more likely to file fraudulent claims on Mondays.

Although they found no evidence that employees who were less likely to have medical coverage were more likely to filed claims on Monday, they observed a statistically significantly higher rate of injuries related to strains and sprains on Mondays than on other days of the week. Noting that Card and McCall (1996) did not have direct access to the medical insurance coverage status of the Workers Compensation claimants studied, Campolieti and Hyatt (2006) studied the Monday Effect on Workers Compensation claims in Ontario, Canada, where all workers have access to medical insurance through a government managed system. As with the previous studies, Campolieti and Hyatt found a higher incidence of claims for injuries that are easy to conceal on Mondays but concluded that since all employees had access to medical coverage the access to health insurance was not a driver of Monday Effect claims.

Butler, Kleinman and Gardner (2014), after having observed claim filing patterns among a firm with 40,727 employees, also found significant evidence to the existence of Monday Effect claims. However, their findings suggested that the Monday Effect may be a result of employees not feeling good about being at work on Mondays and therefore are more prone to recognize their injuries due to their negative disposition.

Although earlier studies did not find a link between Monday Effect claims and access to health insurance, recent medical insurance reform in the United States, such as the Massachusetts Health Care Reform and the Patient Protection Affordable Care Act (PPACA) have brought new opportunities for researchers to study the impact of health insurance on Workers Compensation claims. In 2006, Massachusetts enacted health care reform which required individuals to have health insurance of face a tax. The reform also required all employers, except the smallest, to offer medical insurance to employees.

To make insurance more accessible, the state created a health insurance exchange and instituted income-based state-subsidized plans (Bronchetti and McInerney, 2017). Bronchetti and McInerney found that medical uninsured rate fell by approximately 50% as a result of the reform and the decrease coincided with a 12% decrease in Workers Compensation medical benefits paid between 2005 and 2008. More pertinent to this current study is that Dillender (2015), studying the impact of the loss of medical insurance on workers compensation medical claims, found that at age 26, when an employee would more likely not be covered by health insurance, due to aging off their parent's medical insurance plan, workers compensation medical claims cost amongst that group increased by 8.1%. Dillinder attributed the increase in workers compensation

medical cost mostly to the increase in claims for difficult to diagnose injuries, such as sprains and strains.

These findings indicate that the financial exposure resulting from the lack of medical insurance may cause individuals to file fraudulent workers compensation claims in order to mitigate their loss and is a great example of ex post moral hazard.

CHAPTER III

RESEARCH MODEL AND HYPOTHESES

As presented in this paper, although there is strong evidence supporting the existence of Monday Effect Claims, prior research has failed to provide a conclusive cause for the phenomenon. Rather than look at individual causes of Monday Effect Claims, this study aims to evaluate several factors which may impact the likelihood that an individual may file a Fraudulent Monday Effect Claim (FMEC).

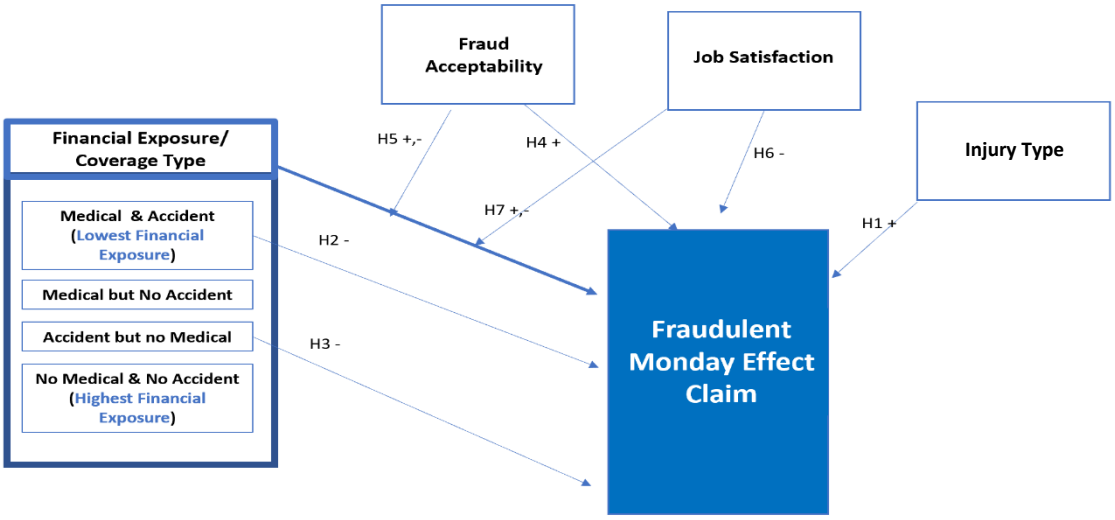


Figure 1. Fraudulent Monday Effect Claim Research Model

Hypotheses

Monday Effect

H1 – Individuals with "hard to conceal injuries" scenarios will be less likely to say that the scenario subject will file a Fraudulent Monday Effect Claim than individuals who receive scenarios with "easy to conceal injuries".

Monday Effect Claims are workers compensation claims filed on Monday for difficult to diagnose injuries. Numerous studies have found evidence of the existence of Monday Effect Claims (Smith. 1990, Butler et al., 2014; Card & McCall, 1996; Campolieti & Hyatt, 2006). Monday Effect Claims are claims filed on Monday for easy to conceal or hard to diagnose injuries such as sprains, strains, and back aches. This is in contract to injuries such as fractures and lacerations which are hard to conceal and easy to diagnose.

Based on the findings of prior studies, it is expected that when presented with a scenario in which the scenario subject's injury is hard to conceal, survey respondents will be more likely to state that the subject will not file a Fraudulent Monday Effect Claim. I expect this hypothesis to be supported regardless of financial exposure, fraud acceptance level or job satisfaction level of survey respondents.

Moral Hazard and Financial Exposure

H2 – Individuals with scenarios where the subject has both medical and accident insurance will be less likely to say that the subject will file a Fraudulent Monday Effect Claim than other combination of coverages

H3 - Individuals with scenarios where the subject has accident coverage and no medical coverage will be less likely to say that the subject will file a Fraudulent

Monday Effect Claim than individuals with scenarios where the subject has no accident and no medical coverage.

Ex post moral hazard dictates that individuals will take certain actions to minimize their financial exposure after an injury occurs (Tennyson, 2008), therefore, it is expected that the lower the financial exposure, the less likely an individual is to take fraudulent action. While individual with medical insurance may still have some level of financial exposure, recent research has shown that when the rate of individuals with medical coverage increased, the rate of workers compensation claims filed among that same population decreased (Bronchetti & McInerney, 2017). However, knowing that even the most robust medical insurance plans can still require individuals to pay some sum of out-of-pocket cost, having accident insurance may further reduce financial exposure but providing cash benefits that can be used to cover these out-of-pocket costs.

In his study, Dillender (2015) found that workers compensation medical injury claims among a population that was less likely to be covered by medical insurance, were for office visits, physical therapy, and chiropractic care – all services that would be covered under an accident plan. Most accident plan will pay a cash benefit directly to the employee for their initial visit to the emergency room, urgent care center or doctor's office. The plans also provide a benefit for physical therapy, chiropractic care and follow-visits. Given Dillender's observation of an increase in small dollar claims, I believe that individuals who have access to an accident plan would be less likely to rely on workers compensation to get treatment for non-job-related injuries, particularly those that occurred while not at work and not eligible to be covered under workers compensation, if

they knew they could minimize their out-of-pocket exposure due to the benefits available under an accident plan.

This study considers various levels of financial exposure caused by a combination medical and accident coverage ranging from the most financial exposure with no medical coverage and no accident coverage to the lowest financial exposure where the scenario subject has both medical and accident coverage, and whether said level impacts someone's decision to as to whether to file a Fraudulent Monday Effect Claim.

Fraud Acceptability

H4 - Individuals with a high fraud acceptance score will be more likely to say that the scenario subject will file a Fraudulent Monday Effect Claim than an individual with a low fraud acceptability score.

H5 – Fraud Acceptance moderates the relationship between financial exposure and the Fraudulent Monday Effect Claims; when given a scenario with a high financial exposure (no medical and no accident), individuals with high Fraud Acceptance scores will be more likely to say that the subject will file a Fraudulent Monday Effect Claim than an individual with low Fraud Acceptance.

While there is seemingly no agreed upon definition for insurance fraud, it is commonly accepted that insurance fraud includes the deliberate or intentional deception by an insurer or insured for financial gain and that there are degrees of fraud (Lesch & Byars, 2008). Workers compensation claims filed on Mondays for injuries that occurred over the weekend, when the employee was not at work, is a fraudulent claim because it misrepresents the location and timing of the injury. Fraudulent Monday Effect Claims can also be considered an opportunistic fraud since the circumstances of the loss were

falsified, meaning the claim was filed for a prior non-job-related injury (Tennyson, 2008). Additionally, Fraudulent Monday Effect Claims can be viewed as benefit fraud, which is defined as since it is a claim for non-work-related injuries that are presented work-related injuries (Tennyson, 2008). Tennyson (2008) asserts that this category of claim typically falls in the realm of "soft fraud" and is less likely to be criminal rather than unethical and may be hard to prove if no concrete evidence exists.

Fraud Acceptance speaks to an individual's approval or tolerance for fraudulent activities (Tennyson, 1996; Colquitt & Hoyt, 1997). Individuals with a high level of fraud acceptance were more likely to participate in fraudulent activities. Citing prior studies, Tennyson (1996) found that states with higher percentage of individuals with high fraud acceptable levels also had higher level of fraudulent auto insurance fraud. Colquitt and Hoyt (1997) found similar findings when investigating how fraud acceptance rates impacted the insurance industry. It can then be surmised, that when it comes to other types of insurance, including workers compensation, individuals with high fraud acceptance levels would be more likely to participate in fraudulent activity.

Determining what motivates an employee to file a Fraudulent Monday Effect Claim may be difficult. Zourrig & Park (2019) pulling from prior research, found that having a mindset which was accepting of fraudulent activities was a key indicator. An individual's level for fraud acceptance may be further linked to other variables. For example, Tseng et al. (2014) found that an individual's age and education level were tied to their level of acceptance fraud which is then linked to their intention to commit fraud. Additionally, gender has also been linked to the rationalization of fraudulent insurance

claim behavior, with men viewing claims padding, a type of fraudulent behavior, as less ethical than women (Tennyson, 2008).

Job Satisfaction

H6 - Individuals with low job satisfaction scores will be more likely to say that the scenario subject will file a Fraudulent Monday Effect Claim than individuals with low job satisfaction

H7 - Job satisfaction moderates the relationship between financial exposure and the Fraudulent Monday Effect Claims; when given a scenario with a high financial exposure (no medical and no accident), individuals with high Job Satisfaction will be less likely to say that the subject will file a Fraudulent Monday Effect Claim than an individual with low Job Satisfaction

Job satisfaction is the positive feelings, and the ensuing actions, resulting from employment related activities (Akbari et al., 2017; Windom, 2019). Job satisfaction impacts many areas of an individual's work experience and behavior, including worker productivity engagement and worker turnover intention (Edmans, 2012; Park & Johnson, 2019). Prior research has also found that employees with higher levels of job satisfaction are more likely to be motivated and engage in safer behavior in the workplace (Barling et al., 2003).

While high levels of job satisfaction can have positive outcomes for both individual and employers, low levels of job satisfaction, or job dissatisfaction, can have negative consequences. When employees have low or decreasing job satisfaction, they may be more likely participate behavior will may be detrimental to the organization, including occupational theft (Hollinger & Clark, 1983; Holton, 2009; Schouteren; 2019).

Although employee theft is not the same as committing insurance fraud, both can be viewed as deviant behavior which negatively impact organizational goals by diverting resources and money from activated that will benefit the organization.

It has been shown that individuals feel more justified in participating in fraudulent or deviant activity when they are disgruntled or otherwise unhappy with way they are treated at work (Holton, 2009; Zourrig & Park, 2019). Therefore, it can be surmised that an individual who is satisfied with the way they are treated at work will be less likely file a Fraudulent Monday Effect Claim.

CHAPTER IV

METHODOLOGY

Research Design

Quantitative data was obtained using a survey. A survey allows for the gathering of information from a specified sample in a systematic and deliberate manner (Groves, 2009). The survey was designed to capture participant attitudes relating to several constructs under study and to develop quantitative descriptors which will then be used to perform analytic statistics to measure how the variables are related (Groves, 2009). The goal of this survey was to explore whether having medical and/or accident insurance impacts the likelihood that an individual would file a Fraudulent Monday Effect claim and whether there are other factors that influences the individual's decision. However, finding participants who have actively engaged in this type of fraud and are willing to share their motivation of participating in such activities would be difficult. Given the challenges of getting access to firsthand accounts from those who have actively elected to participate in the type of fraudulent behavior which is the focus of this study, the use of research vignettes was employed.

Vignettes are hypothetical stories that "vary in systematic ways along dimensions decided in advance by the researcher based on theory or previous empirical research" (Carlson, 1999) and have been used extensively in both qualitative and quantitative research. According to Barr and Renold (1999), in social research, vignettes can be used to explore actions of participants in context and to get a better understanding of the way people make judgements. According to Tseng et al. (2014) using scenarios allows for greater standardization in the measurements being used as well as greater control over the

variables being presented to study participants. Additionally, vignettes can be used explore sensitive topics in a less threatening way. Insurance research, especially research related to insurance fraud often uses vignettes or scenario-based designs (Dean, 2004; Tseng et al., 2014).

For this study, a set of 18 vignettes were initially created using the various variables of interest. Each vignette presented the near identical scenario of an individual who is injured while not at work and needs to determine how to access medical care. The vignettes were systematically different with differences representing a combination of the various variables of interest. The number of vignettes were expanded to 36 to include 2 sets of 18 vignettes, one set with male vignette subjects and the other with female vignette subjects. The final vignettes included a combination of the following variables is captured in Table 1 and examples of vignettes used in this study is shown in Figure 2 below.

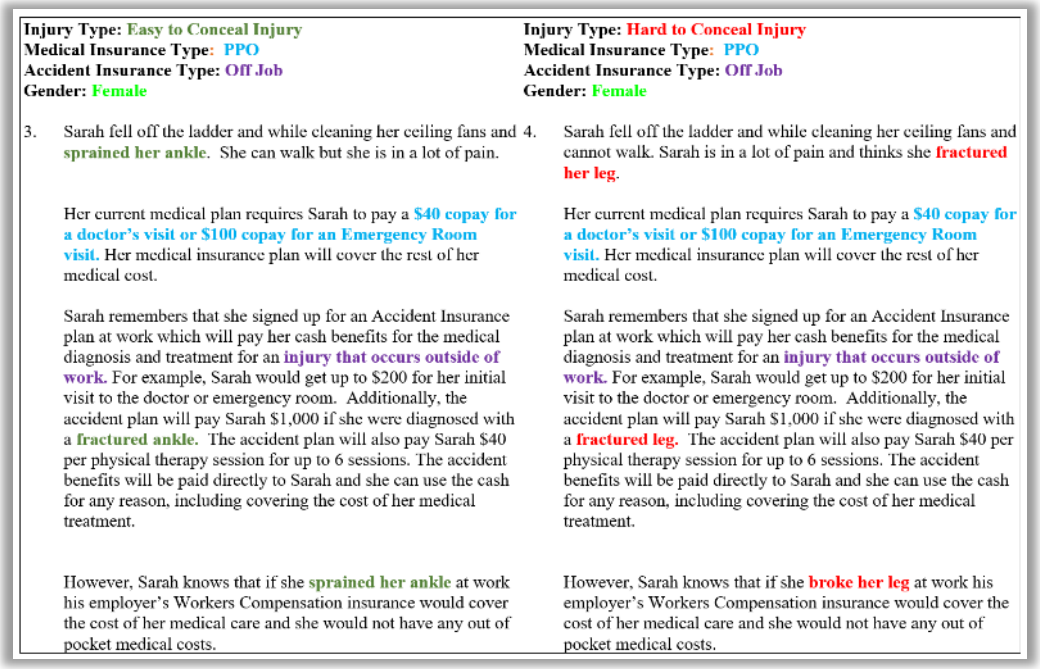
Table 1

Vignette Variables

Vignette Subject Gender	Injury Type	Medical Plan	Accident Plan Type
Male	Easy to conceal	None	None
Female	Hard to conceal	High Deductible Plan	Off Job Coverage Only
		PPO (Co-pay only)	On/Off Job Coverage

Figure 2

Examples of survey vignettes. Both present PPO medical coverage, Off the job accident insurance, female scenarios subjects, but differ in injury type.



Injury Type: Easy to Conceal Injury **Medical Insurance Type: PPO** **Accident Insurance Type: Off Job** **Gender: Female**	**Injury Type: Hard to Conceal Injury** **Medical Insurance Type: PPO** **Accident Insurance Type: Off Job** **Gender: Female**
3. Sarah fell off the ladder and while cleaning her ceiling fans and **sprained her ankle**. She can walk but she is in a lot of pain.	4. Sarah fell off the ladder and while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she **fractured her leg**.
Her current medical plan requires Sarah to pay a **$40 copay for a doctor's visit or $100 copay for an Emergency Room visit.** Her medical insurance plan will cover the rest of her medical cost.	Her current medical plan requires Sarah to pay a **$40 copay for a doctor's visit or $100 copay for an Emergency Room visit.** Her medical insurance plan will cover the rest of her medical cost.
Sarah remembers that she signed up for an Accident Insurance plan at work which will pay her cash benefits for the medical diagnosis and treatment for an **injury that occurs outside of work.** For example, Sarah would get up to $200 for her initial visit to the doctor or emergency room. Additionally, the accident plan will pay Sarah $1,000 if she were diagnosed with a **fractured ankle.** The accident plan will also pay Sarah $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Sarah and she can use the cash for any reason, including covering the cost of her medical treatment.	Sarah remembers that she signed up for an Accident Insurance plan at work which will pay her cash benefits for the medical diagnosis and treatment for an **injury that occurs outside of work.** For example, Sarah would get up to $200 for her initial visit to the doctor or emergency room. Additionally, the accident plan will pay Sarah $1,000 if she were diagnosed with a **fractured leg.** The accident plan will also pay Sarah $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Sarah and she can use the cash for any reason, including covering the cost of her medical treatment.
However, Sarah knows that if she **sprained her ankle** at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.	However, Sarah knows that if she **broke her leg** at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.

Data Collection Process

Prior to releasing the vignettes and accompanying questions, approval was sought and granted by Florida International University's Institutional Review Board (IRB). In order to maintain privacy and to meet the ethical standard set forth by the IRB an informed consent form was presented to each participant.

Survey responses were solicited via Facebook including my personal network and high school and college alumni groups. The message introducing the survey and requesting responses specifically asked respondents to share the survey across their own personal networks with hopes of increasing the number of participants and to increase the variability of respondents. Although a sample obtained in this manner is considered to be

a convenience sample (Chandler & Shapiro, 2016), crowdsourcing using Facebook allowed me to access a large number of individuals representative of the general adult population in the United States of working age.

The study was designed in three parts: one section required participants to read a randomly assigned vignette after which they were asked to respond to questions which asked about the likelihood that the scenario subject will file a Fraudulent Monday Effect Claim with answers being on a five-point scale from 1 (Not likely) to 5(Very Likely). This section also includes a question regarding the participant's perception of the injury type (easy to conceal vs. hard to conceal) as well as the participants perception of the medical financial exposure presented in the scenario (low to high). In the second section, participants were presented with five Fraud Acceptance items and three Job Satisfactions items. The Fraud Acceptance items were adapted from a previously developed scale by Tennyson (2002) and the Job satisfaction questions were adapted from Barling et al. (2003). Both were designed using a five-point Likert scale, from 1 (strongly agree) to 5 (strongly disagree). Finally, in Section 3, participants were presented with a series of demographic questions, including age, educational level, employment status, etc. (See Appendix).

Tennyson (2008), citing prior research, stated that studies on consumer surveys have suggested that suggests that when primed by prior questions that, consumers are likely to understate their acceptability of fraud. Recognizing that the placement and order of questions presented in one section can influence responses of questions in subsequent sections, sections one and two were randomly ordered so that some participants were

presented with the vignettes first, while others were presented with the Fraud Acceptability and Job Satisfaction questions first.

Informed Pilot and Pilot Test

Prior to the pilot test, an informed pilot was administered to test the feasibility of the survey instrument. Members of Florida International University's Doctorate of Business (DBA) Cohort 1 and 2 were asked to take the survey via email with the link to the Qualtrics survey included in the email request. The findings of the informed pilot were used to determine whether the scenarios and ensuing questions are easy to understand and yield the expected data. Feedback solicited from informed pilot participants (performed using a small group of Facebook participants) was used to update the scenarios and questions as necessary.

Responses from the pilot test allowed me to ensure that my vignettes are easy to understand and clearly convey the situation that I would like each responded to respond to. The pilot test also allowed me to confirm that the measurement items truly measured the constructs that I intended to measure. The inclusion of the perception of medical financial item was a result of feedback from the pilot study.

Employing the use of a pilot test also offered the opportunity for me to address whether the placement of the Fraud Acceptance questions had an impact on an individual's response. In reviewing past studies on fraud, Tennyson (2002) found that when asked a series of ethical questions before the acceptance of fraud questions, participants were significantly less likely to claim that they would be accepting of fraudulent behavior than studies that did not including the priming questions. This revelation causes concern that the placement of the Fraud Acceptance questions, whether

it is before or after the moral hazard scenarios questions, may impact the way in which a participant responds to the moral hazard questions.

To test for this affect, some pilot study participants were presented with the Fraud Acceptance questions before being presented with the vignettes scenario and others saw them after they read the scenario. The results of the pilot study led to the random ordering of the questions being included in the final survey design.

Data Management

Survey responses were confidential and anonymous. In Qualtrics, privacy settings were selected to ensure that responses remained confidential and anonymous. The data file was downloaded and saved to the study author's computer. As the data did not include any identifiable data, it was not password protected.

Of the 1,061 individuals to access the survey, thirty-eight (38) respondents did not qualify to participate due to not being residents of the United States and two (2) indicated that they were not over age eighteen. Of the remaining, there were 507 responses in which all questions were answered.

The 507 responses were saved in a separate data file and used to perform the ensuing data analysis. Prior to being uploaded into SPSS, the data was edited to clearly identify which version the vignette a participant received. The ordering of sections vignette block and the Fraud Acceptance and Job Satisfaction block was also identified.

Data Analysis

The design of this research relied on the use of Likert scales to measure participant attitudes and therefore, yielded nonparametric data. Likert scales produce ordinal data that require specific nonparametric testing techniques (Mircioiu & Atkinson,

2017). In order to reveal the strength of the relationships between sets of non-parametric data, Spearman's Rho Correlation, also referred to as Spearman's Rank, was used. Correlation testing is a technique that examines and identifies the association between 2 or more variables (Xiao et al., 2016). While Pearson's Correlation testing measures the strength of linear associations, Spearman's rho measures the strength of non-linear relationships (Rebekić et al., 2015). Pearson's correlation is used with numerical data such as interval or ration scales that are normally distributed. On the other hand, Spearman's Rank testing is more appropriate to use with ordinal data, when there is no assumption of normal distribution or linear relationship.

The outcome of a correlation test is a correlation coefficient, *r*, which has a value that varies from -1 to +1 (Xiao et al., 2016). The correlation coefficient helps determine the direction and the strength of the relationship between the variables under analysis. A positive correlation coefficient signifies a positive relationship in which as one variable moves up or down, so does the other. For example, as one variable moves up, so does the other or vice versa. A negative coefficient indicates a negative relationship which means as one variable moves in one direction, the other variable moves in the opposite direction. The strength of the relationship is represented by the absolute value of the number; the closer to +1 or -1, the stronger the relationship and the closer to "0", the weaker the relationship. A coefficient that is equivalent to 0 means relationship is unlikely exist (Rebekić et al., 2015; Xiao et al., 2016).

Mann Whitney is another nonparametric test that was used in this analysis. Mann Whitney is used when comparing the difference between the ranked means of two sets of ordinal variables.

CHAPTER V

RESULTS

The data analysis is presented in this section and includes an examination of the hypotheses presented in this study. Data analysis was conducted in IBM SPSS Statistics (2019). Analysis methodologies included Spearman's rho correlation and Mann Whitney, both tests used specifically for the analysis of non-parametric data.

Samples Descriptives

A frequency table of the sample demographics are presented in Table 2 below. Of the 1,061 participants who accessed the survey, 507 completed all questionnaire items. 62.92% (319) of the sample were female, and 36.69% (186) males and .39% (2) who did not identify as male or female. The majority of the respondents were between the ages for 36 and 59 (68.24%). Most of the sample either held a Bachelors (34.12%) or post graduate degree (49.31%). A large percentage of the sample indicated that their annual income was above $100,000 (47.93%), while only 7.1 % of the sample indicated a salary of under $25,000.

Table 2

Demographic Variables

Category	Variable	Frequency	Percent
Gender	Does not Identify as Male or Female	2	0.39
	Female	319	62.92
	Male	186	36.69
	Total	507	100.0
Age Range	18-25	25	4.93
	26-35	52	10.26
	36-45	104	20.51
	46-55	191	37.67
	56-59	51	10.06
	60-64	47	9.27
	65 and older	37	7.30
	Total	507	100.0
Education	High school diploma/ GED or less	57	11.24
	Associates Degree	27	5.33
	Bachelor's Degree	173	34.12
	Post graduate Degree	250	49.31
	Total	507	100.0
Annual Income	Under $25,000	36	7.10
	$25,000 - $49,999	64	12.62
	$50,000 - $74,999	88	17.36
	$75,000 - $99,999	76	14.99
	Over $100,000	243	47.93
	Grand Total	507	100.0

Analysis of Hypotheses

Hypothesis One (H1)

The first hypothesis (H1) states that participants who were presented with vignettes that included Hard to Conceal Injuries would be less likely to state that the vignette subject would file a Fraudulent Monday Effect Claim. Fraudulent Monday Effect Claims are workers compensation claims filed on Monday for injuries that occurred over the weekend when the claimant was not at work. Of the 507 respondents 258 (50.89%)

were presented with vignettes in which the scenario subject suffered an Easy to Conceal Injury:

"*Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He is in a lot of pain but he can walk."*

The remaining 249 (49.11%) participants were presented with vignettes with a Hard to Conceal Injury and frequencies are presented in Table 3:

"*Mark fell off a ladder while cleaning his ceiling fans and fractured his ankle. Mark is in a lot of pain and cannot walk."*

Table 3

Injury Type in Scenario (ITS) Frequency

Injury Type	Frequency	Percent
Easy to Conceal (0)	258	50.89
Hard to Conceal (1)	249	49.11
Grand Total	507	100.00

Although the scenarios language was designed to capture the difference in the severity and types of injuries, the participants were provided with to opportunity to record their perception of the injury type using a scale of 1(very easy to conceal) to 6 (very hard to conceal). Frequencies are reported in Table 4 below.

Table 4

Participant Perception of Injury Type (ITP) Frequency

Perception of Injury Type (ITP)	Frequency	Percent
Very easy to conceal (1)	4	0.79
Easy to conceal	15	2.96
Somewhat easy to conceal	69	13.61
Somewhat hard to conceal	129	25.44
Hard to conceal	169	33.33
Very hard to conceal (6)	121	23.87
Total	507	100.00

"In the scenario you just read, how would you describe the injury the individual sustained?"

Spearman's rho correlation was used to confirm that participants' perceptions of the injury type aligned with the intended injury type presented in the vignette and the results are presented in Table 5. There was a negative correlation between the Scenario Injury Type and the participant's perception of the injury type (r_s-.554, p=.000), which means that the correlation is significant at a .01 level.

Table 5

Participant Perception of Injury Type (ITP) and Injury Type in Scenario (ITS) Correlations

Correlations				
			ITP	ITS
Spearman's rho	ITP	Correlation Coefficient	1.000	-.554**
		Sig. (2-tailed)		0.000
		N	507	507
	ITS	Correlation Coefficient	-.554**	1.000
		Sig. (2-tailed)	0.000	
		N	507	507

Correlation is significant at the 0.01level (1-tailed).**

Given the significant relationship between the Participant's Perception of Injury Type (ITP) and the intended injury type presented in the scenario (ITS), I used the Participant's Perception of Injury Type (ITP) to analyze relationship between injury type and the likelihood that the participant would indicate that the scenario subject would file a Fraudulent claim (FMEC). A significant correlation was found (r_s=.271, p=0.000) and is presented in Table 6. The findings provide support for Hypothesis 1, that participants who were presented with scenarios that they perceived as a hard to conceal injury would be less likely than participants who were presented with easy to conceal injuries to say that the vignette participant would file a Fraudulent Monday Effect Claim (FMEC).

Table 6

Fraudulent Monday Effect Claim (FMEC) and Participant Perception of Injury Type (ITP) Correlation

Correlations				
			FMEC	ITP
Spearman's rho	FMEC	Correlation Coefficient	1.000	.271**
		Sig. (1-tailed)	.	.000
		N	507	507
	ITS	Correlation Coefficient	.271*	1.000
		Sig. (1-tailed)	.000	
		N	507	507

*. Correlation is significant at the 0.01 level (1-tailed).

These findings lend further support to existing research on the existence of Monday Effect Claims. Prior studies have found an increase in workers compensation claims filings on Monday for easy to conceal/difficult to diagnose injuries such as sprains and strains on Mondays when compared to other days of the week (Benjamin Hansen, 2016; Card & McCall, 1996; Campolieti & Hyatt, 2006; Butler, Kleinman & Gardner; 2014). Some researchers have asserted that a portion of these claims can be attributed to employees who were injured outside of work who, instead of getting treatment outside of work, come in to work on Mondays to file a workers compensation claim (Smith, 1989). Researchers propose that the cause of this action may be due to the individual wanting to take advantage of the medical care provided under workers compensation which is provided at no cost to employees.

Hypothesis Two (H2)

Hypotheses Two (H2) predicted that participants who were presented with scenarios where the subject in the vignette had the lowest financial exposure, defined as having both medical and accident insurance, would be less likely to say that the subject

would file a Fraudulent Monday Effect Claim than subjects with higher levels of financial exposure. Financial Exposure levels presented in the scenario, as displayed in Table 7, ranged from 1 (Very Low/Medical and Accident Insurance) to 4 (Very High/No Medical and No Accident Insurance).

Table 7

Financial Exposure in Scenario (FES) Frequency

Financial Exposure	Definition	Frequency	Percent
Very Low (1)	No Medical Insurance and No Accident Insurance	228	44.97
Low	Medical Insurance and No Accident Insurance	116	22.88
High	No Medical Insurance and Accident Insurance	109	21.50
Very High (4)	No Medical Insurance and No Accident Insurance	54	10.65
Total		507	100.00

In order to ensure that participants perception of the financial exposure was aligned with the intended financial exposure level included in the scenario, participants were asked the following questions. Frequency statistics are presented below in Table 8:

> *In the scenario you just read, how would you rate the level of medical financial exposure the individual has?*

Table 8

Participant Perception of Financial Exposure (FEP) Frequency

Perception of Financial Exposure	Frequency	Percent
Very low (1)	42	8.28
Low	229	45.17
High	199	39.25
Very high (4)	37	7.30
Grand Total	507	100.00

Spearman's rho correlation was used to confirm that participants' perceptions of the financial exposure aligned with the financial scenario intended to be presented in the

vignette. The analysis revealed a significant correlation between the Financial Exposure in the Scenario (FES) and the participant's perception of the financial exposure (FES) presented in the scenario (r_s=.228, p=.000), which means that the correlation is significant at a .01 level. This data is displayed in Table 9 below.

Table 9

Participant Perception of Financial Exposure (FEP) and Financial Exposure in Scenario (FES) Correlations

Correlations				
			FEP	FES
Spearman's rho	FEP	Correlation Coefficient	1.000	.228**
		Sig. (1-tailed)	.	.000
		N	507	507
	FES	Correlation Coefficient	.228**	1.000
		Sig. (1-tailed)	.000	.
		N	507	507

**. Correlation is significant at the 0.01 level (1-tailed).

Given that there is a significant correlation between the participant's Perception of Financial Exposure (FEP) and the financial exposure intended to be represented in the scenario (FES), I elected to explore both relationships. I analyzed the correlation between the participant's Perception of Financial Exposure (FEP) and the likelihood that the participant would indicate that the scenario subject would file a Fraudulent claim (FMEC) was analyzed. As presented in Table 10, there was no significant correlation between the two variables (r_s=.03, p=.252) indicating that Hypothesis Two (H2) is unsupported and that level of financial exposure does not appear to be a significant factor in determining whether an individual is likely to file a Fraudulent Monday Effect Claim (FMEC).

Table 10

Fraudulent Monday Effect Claim (FMEC) and Financial Exposure in Scenario (FES) Correlations

		Correlations		
			FMEC	FES
Spearman's rho	FMEC	Correlation Coefficient	1.000	.030
		Sig. (1-tailed)	.	.252
		N	507	507
	FES	Correlation Coefficient	.030	1.000
		Sig. (1-tailed)	.252	.
		N	507	507

In addition to exploring the relationship between the Financial Exposure in the Scenario and the likelihood that the participant indicate the scenario subject would file a Fraudulent Monday Effect Claim (FMEC), I evaluated the relationship between FMEC and the participants' perception of the financial exposure presented within the scenario (FEP). The Spearman's rho, as presented in Table 11, revealed that there was no relationship between participant's perception of financial exposure (FEP) and the likelihood that the participant believed that the scenario subject would file a Fraudulent Monday Effect claim. This additional finding confirms that financial exposure, based on the level of insurance coverage, was likely not in determining factor in an individual's decision to file a Fraudulent Monday Effect Claim.

Table 11

Fraudulent Monday Effect Claim (FMEC) and Participant's Perception of Financial Exposure (FEP) *Correlation*

Correlations				
			FMEC	FEP
Spearman's rho	FMEC	Correlation Coefficient	1.000	.067
		Sig. (1-tailed)	.	.065
		N	507	507
	FES	Correlation Coefficient	.067	1.000
		Sig. (1-tailed)	.065	.
		N	507	507

Hypothesis Three (H3)

Further exploring the impact between the level of financial exposure, as based on whether or not an individual had Accident coverage, and the filing of Fraudulent Monday Effect Claims, hypothesis three (H3) predicted that survey participants who were presented with a scenario in which the vignette subject had Accident Insurance and no Medical Insurance would be less likely to state that the participant would file a Fraudulent Monday Effect Claim than subjects who had no medical and no accident coverage. The goal of this analysis is to specifically analyze whether the benefits provided by an accident plan would impact an individual's decision to file a Fraudulent Monday Effect Claim.

Accident Insurance provides cash benefit to an individual who suffers an accidental injury. The financial value of benefits provided by the plan is based on the level of the injury. Additionally, Accident Insurance will pay benefits whether the individual has any other insurance coverage, including Workers Compensation. Many researchers, including Smith (1989), as well as many in the insurance industry (Aflac, 2014) have posited that individuals without medical coverage or with medical coverage

that has a high out of pocket cost, will be more likely file a Fraudulent Monday Effect claim in order to access the medical coverage provided by workers compensation. Workers compensation pays 100% of the cost of medical care when the reported injury is a result on an accident or occupational illness. Researchers believe that the promise of the rich benefits provided through the Workers compensation would incent individuals who expect to have to cover the cost of medical treatment on their own due to not having medical insurance, or who would expect to incur out of pocket cost as a result of their health plan's cost structure, to take actions to mitigate their financial exposure. Ex post moral hazard dictates that when an individual is confronted with financial risk, the individual will take action to mitigate their losses (Tennyson, 2008).

In order to evaluate the impact of having an accident plan on Fraudulent Monday Effect Claim filing, a Mann-Whitney test was applied to test if there were differences in the Fraudulent Monday Effect Claim (FMEC) filing for the group of participants who were presented with scenarios where the vignette subject had accident insurance and the group with vignettes with no accident insurance and no medical insurance. The results, as displayed in Table 12, indicated that there were no statistical differences between Fraudulent Monday Effect Claim filing between with only the group with accident only coverage (84.09) and the group with accident and medical coverage (77.78), $U=2715$, $Z=-.829$, $p=.407$ ($>.05$). This finding suggests that having accident insurance is not a driver in determining whether a Fraudulent Monday Effect Claim would be filed.

Table 12

Mann-Whitney – Financial Exposure in Scenario (FES) by Coverage Status

Ranks				
FMEC	FES	N	Mean Rank	Sum of Ranks
	Accident Only	109	84.09	9166.00
	No Medical and No Accident	54	77.78	4200.00
	Total	163		

Test Statistics[a]	
	FMEC
Mann-Whitney U	2715.000
Wilcoxon W	4200.000
Z	-.829
Asymp. Sig. (2-tailed)	.407

a. Grouping Variable: FES

Hypothesis Four (H4)

The fourth hypothesis (H4) states that individuals with a high Fraud Acceptance scores would be more likely to say that the scenario subject will file a Fraudulent Monday Effect Claim than individuals with low fraud acceptability scores. Fraud acceptability measures an individual's tolerance or approval or acceptance of fraudulent activities (Tennyson, 2002). Fraud Acceptability (FAS) was measured using a 5-item questionnaire adapted from a previously developed scale by Tennyson (2002) and designed using a five-point Likert scale, from 1 (strongly agree) to 5 (Strongly Disagree).

Table 13 displays the analysis which revealed a significant, positive relationship between Fraud Acceptability Score (FAS) and the likelihood that Fraudulent Monday Effect Claim (FMEC) would be filed (r_s=.195, p=.000). Consistent with Tennyson's (2002) prior findings, this analysis shows that as an individual's Fraud Acceptability Score increases, the likelihood that the individual would say that the scenario subject would participate in the act of filing a Fraudulent Monday Effect Claim increases.

Therefore, it can be surmised that individuals with higher degree of fraud acceptability, may be more likely to engage in fraudulent activities such as filing a workers compensation claim for an injury that took place when the individual was not engaged in work-related activities.

Table 13

Fraudulent Monday Effect Claim (FMEC) and Fraud Acceptability Score (FAS) Correlations

Correlations				
			FMEC	FAS
Spearman's rho	FMEC	Correlation Coefficient	1.000	.195**
		Sig. (1-tailed)	.	.000
		N	507	507
	FAS	Correlation Coefficient	.195**	1.000
		Sig. (1-tailed)	.000	.
		N	507	507

**. Correlation is significant at the 0.01 level (1-tailed).

To fully explore hypothesis 4 (H4) the placement of the Fraud Acceptability items must be discussed. Understanding that participants' responses to survey items may be impacted by the order in which items are presented (Babbie, 2016), an evaluation of the variance in responses between the groups was performed. The first group was presented with the Fraud Acceptability questions before being presented with the vignette and the Fraudulent Monday Effect Claim question (n=259). The second group was presented with the Fraud Acceptability questions after being presented with the vignette and Fraudulent Monday Effect Claim question (n=248).

Results of the analysis indicate that while there was a slightly stronger relationship within the group presented with the Fraud Acceptability questions first (r_s=.212, p=.000), when compared to the group presented with the Fraud Acceptability questions after reading the vignette (r_s=.175, p=.003). The findings as presented in Table

14, support the assertion that placement of the Fraud Acceptability questions may not have significantly impacted the participants' response to the Fraudulent Monday Effect question based on whether they were presented with the Fraud Acceptability questions before or after reading the scenario.

Table 14

Fraudulent Monday Effect Claim (FMEC) and Fraud Acceptability Score (FAS) Correlation by Placement

Correlations					
Spearman's rho	Order of Question			FMEC	FAS
	Fraud Acc. Before	FMEC	Correlation Coefficient	1.000	.212**
			Sig. (1-tailed)	.	.000
			N	259	259
		FAS	Correlation Coefficient	.212**	1.000
			Sig. (1-tailed)	.000	.
			N	259	259
	Fraud Acc. After	FMEC	Correlation Coefficient	1.000	.175**
			Sig. (1-tailed)	.	.003
			N	248	248
		FAS	Correlation Coefficient	.175**	1.000
			Sig. (1-tailed)	.003	.
			N	248	248

**. Correlation is significant at the 0.01 level (1-tailed).

Hypothesis Five (H5)

Hypothesis 5 predicted that the relationship between Financial Exposure and Fraudulent Monday Effect Claim filing would be moderated by Fraud Acceptance. It was expected that when presented with scenarios with high financial exposure (no medical insurance and no accident insurance), participants who scored high on the Fraud

Acceptance scale would be more likely to say that a Fraudulent Monday Effect Claim would be filed than individuals with low Fraud Acceptance scores.

Hypothesis 3 and 4 asserted that there would be a significant positive relationship between the Financial Exposure presented in the scenario and the likelihood that a Fraudulent Monday Effect claim would be filed. However, the findings of this study did not support either of these hypotheses. It can then be surmised that financial exposure alone will not incent individuals to file a Fraudulent Monday Effect Claim. Therefore, when analyzing Hypothesis 5, although there is a significant relationship between the interaction of Financial Exposure and Fraud Acceptability (r_s=.123, p=.001), as presented in Table 15 below, it appears that any semblance of a relationship is based on the relationship between Fraud Acceptability and Fraudulent claim filing (r_s=.105, p=.000) rather than the impact of the interaction between Financial Exposure and Fraud Acceptability (r_s=.030, p=.252).

Table 15

Fraudulent Monday Effect Claim (FMEC) and Fraud Acceptability Score (FAS) and Financial Exposure in Scenario (FES) Interaction Correlations

Correlations					
		FMEC	FAS	FES	IntFASxFES
Spearman's rho	Correlation Coefficient	1.000	.195**	.030	.136**
	Sig. (1-tailed)	.	.000	.252	.001
	N	507	507	507	507

**. Correlation is significant at the 0.01 level (1-tailed).

Hypothesis Six (H6)

The sixth hypothesis (H6) stated that individuals with low Job Satisfaction scores would be more likely to state that the scenario subject would file a Fraudulent Monday

Effect Claim than individuals with a high Job Satisfaction scores. Job Satisfaction was measured using a 3-item scale, adapted from Barling et al. (2003), with a five-point Likert Scale with responses ranging from 1 (strongly agree) to 5 (strongly disagree). Specific questions are presented in Table 16 below. The questions asked whether the participant was satisfied with treatment received at work, whether the job was a good place to work and whether the participant thought about leaving the job.

Prior to interpreting the data, the scores for the third item "I often think about leaving my current job" was recoded so that a score of 1 represented "strongly disagree" and a score of 5 represented "strongly agree". This was done to create a new variable which aligned with the directional value of the other items in the scale. The scores from the existing values were combined with the score of the new recoded variable to form a mean score, creating a new Job Satisfaction variable with values ranging from 1(strongly disagree) to 5 (strongly agree).

Table 16

Job Satisfaction (JSAT) Questionnaire items

Three Key Questions
1. I am satisfied with the way I am treated at my current job
2. My current job is a good place to work
3. I often think about leaving my current job

Once again, due to the nonparametric nature of this data, the relationship between Job Satisfaction and Fraudulent Monday Effect Claim filing was measured using Spearman's correlation. The results of the analysis, as presented in Table 17 below indicated that there was a negative relationship between the two variables but that the

relationship was not significant (r_s=-.047, p=.147) and therefore, Hypothesis 4 is unsupported.

Table 17

Fraudulent Monday Effect Claim (FMEC) and Job Satisfaction (JSAT) Correlations

Correlations				
			FMEC	JSAT
Spearman's rho	FMEC	Correlation Coefficient	1.000	-.047
		Sig. (1-tailed)	.	.147
		N	507	507
	JSAT	Correlation Coefficient	-.047	1.000
		Sig. (1-tailed)	.147	.
		N	507	507

Hypothesis Seven (H7)

Hypothesis 7 predicted that Job Satisfaction would moderate the relationship between Financial Exposure in Scenario (FES) and Fraudulent Claims filing. The expectation was that when facing a scenario with high Financial Exposure, participants with high Job Satisfaction scores would be less likely to indicate that a Fraudulent Monday Effect Claim would be filed than individuals with low Job Satisfaction scores. This supposition is based on prior studies indicating that individuals with high job satisfactions are less likely to engage in deviant behavior or behavior which is detrimental to the organization (Hollinger & Clark, 1983; Holton, 2009; Schouteren; 2019).

In order to test Hypothesis 7, an interaction variable was created (IntxJSATxFES). An analysis was then performed to test the relationship between the interaction variable and the Fraudulent Monday Effect Claim variable. Spearman's rho revealed that there was no statistically significant relationship between the interaction of

Job Satisfaction and Financial Exposure as presented in the scenario and the likelihood of a Fraudulent Monday Effect Claim filing (r_s=.002, p=.480), leaving Hypothesis 7 as unsupported. Results are presented in Table 18 below.

Table 18

Fraudulent Monday Effect Claim (FMEC) and Job Satisfaction (JSAT) and Financial Exposure in Scenario (FES) Interaction Correlations

Correlations				
			FMEC	IntJSATxFES
Spearman's rho	FMEC	Correlation Coefficient	1.000	.002
		Sig. (1-tailed)	.	.480
		N	507	507
	IntJSATxFES	Correlation Coefficient	.002	1.000
		Sig. (1-tailed)	.480	.
		N	507	507

Summary of Findings

Of the seven hypotheses presented in this study, 2 were supported while 5 were unsupported. A summary of the findings is presented in Table 19 below.

Table 19

Summary of Findings

Area of Focus	Hypothesis Number	Hypothesis	Findings
Injury Type	1	Individuals with "hard to conceal injuries" scenarios will be less likely to say that the scenario subject will file a fraudulent Monday Effect Claim than individuals who receive scenarios with "easy to conceal injuries".	Supported
Financial Exposure	2	Individuals with scenarios where the subject has both medical and accident insurance will be less likely to say that the subject will file a Fraudulent Monday Effect Claim when compared to other combination of coverages/ level of financial exposure.	Unsupported

Financial Exposure	3	Individuals with scenarios where the subject has accident coverage and no medical coverage will be less likely to say that the subject will file a Fraudulent Monday Effect Claim than individuals with scenarios where the subject has no accident and no medical coverage.	Unsupported
Fraud Acceptability	4	Individuals with a high Fraud Acceptance score will be more likely to say that the scenario subject will file a Fraudulent Monday Effect Claim than an individual with a low Fraud Acceptability score.	Supported
Fraud Acceptability and Financial Exposure	5	Fraud Acceptance moderates the relationship between financial exposure and the Fraudulent Monday Effect Claims; when given a scenario with a high financial exposure (no medical and no accident), individuals with high Fraud Acceptance scores will be more likely to say that the subject will file a Fraudulent Monday Effect Claim than an individual with low Fraud Acceptance.	Unsupported
Job Satisfaction	6	Individuals with low job satisfaction will be more likely to say that the scenario subject will file a Fraudulent Monday Effect Claim than individuals with high job satisfaction.	Unsupported
Job Satisfaction and Financial Exposure	7	Job satisfaction moderates the relationship between financial exposure and the Fraudulent Monday Effect Claims; when given a scenario with a high financial exposure (no medical and no accident), individuals with high Job Satisfaction will be less likely to say that the subject will file a Fraudulent Monday Effect Claim than an individual with low Job Satisfaction.	Unsupported

CHAPTER VI

DISCUSSION

Unlike ex ante moral hazard, which speaks to an individual's behavior before a loss, ex post moral hazard speaks to an individual's behavior after a loss has been experienced. Ex post moral hazard proposes that after experiencing a loss, an individual will take action to minimize the impact of the loss (Cummins & Tennyson,1996). When the loss is financial, the characteristic of action may be dependent on the magnitude of the loss and whether the individual has options available that could cover said loss. Ex post moral hazard can manifest in one of two ways: claims can be falsified or the loss can be exaggerated. According to Guo and Burton (2010), in regards to ex post moral hazard and workers compensation insurance, when individuals have access to workers compensation insurance, they may be more likely to file claims for injuries that may have otherwise gone unreported. Ex post moral hazard exists because employers and insurers are unable to observe the nature and severity of the injury. Additionally, depending on the nature of the type of injury, where and when the injury occurred (Martinon, 2018).

Moral hazard exists when an individual can make choices as to how they will behave after a loss. In the case of Fraudulent Monday Effect Claims, after having suffered an accidental injury outside of the workplace which needs medical care, the individual can choose how he or she will cover the cost of treatment, or even whether to receive treatment. An individual also has the options of engaging in "loss adjustment activities" (Götze & Gürtler, 2020) in order to mitigate their losses. Options for paying for the cost of medical care includes using health insurance, paying using savings or

another non-insurance options, using debt or relying on the medical benefits available through workers compensation insurance.

A specific type of workers compensation claims has intrigued researchers for decades. Monday Effect Claims, a topic first explored by Robert Smith in 1989, refers to workers compensation claims filed on Mondays for difficult to diagnose or easy to conceal. In his study, Smith acknowledged that the claim that workers reported off the job injuries as work-related injuries was part of "the oral tradition of workers compensation". Wishing to further explore the topic, he embarked on a journey to provide more tangible evidence to this claim. He did so by observing patterns of injury claims filing and posited that injuries that could conceivably be misrepresented as having occurred on the job would most likely be reported on earlier in the day on Mondays. According to Smith, because these injuries in question really did occur, the individual would be in some level of pain and having delayed treatment, would want to get care as soon as possible after returning to work. Additionally, Smith supposed that if his theory was correct, he would expect to see an even higher number of these types of claims after a three-day weekend.

Smith tested his hypothesis using the Bureau of Labor Statistics' (BLS) Supplemental Data System (SDS) which included a dataset from 1979 which included injury claims from 1978 and 1979. The dataset used in Smith's study included injuries from Colorado, Delaware, North Carolina, and Virginia and included the type of injury, the date and day the injury was reported and the time the injury was reported. To test his hypothesis, Smith bucketed the claims into 4 subsets, focusing on the three subsets that covered his areas of interest: sprains and strains, which represented 35% of the total

claims, cuts, and lacerations (19%) and fractures (16%). Smith found that in both years of data, on the day after a weekend (Mondays and Tuesday after a holiday), strains and sprains represented a higher percentage of reported injuries than fractures and lacerations and that the difference was statically significant. Additionally, Smith's analysis showed that the percentages of sprains reported on the first day of the workweek were higher than reported during the rest of the week and that the difference was also statistically significant. Smith also found that strains and sprains were reported earlier in the day on all days of the week when compared to fractures and lacerations. Providing further evidence to his hypothesis, the data showed that on days, or days following a holiday weekend, all types of injuries under examination were reported earlier in the day than on the other days of the week. Smith concluded that the findings of his study is evidence that some amount of workers compensation claims filed, particularly on Mondays, were being falsely reported. He estimated this number to be 4% for strains and sprains and 1% for fractures, accounting for approximately 2% of total benefits paid for strains, sprains, fractures, lacerations, and cuts, the most common injuries.

Smith's work has been referenced in many studies aimed at providing insight into the drivers of Fraudulent Monday Effect Claims filing (Card & McCall, 1996; Campolieti & Hyatt. 2006; Butler et al., 2014; Hansen, 2016). Other researchers have confirmed that existence of the Monday Effect phenomenon but have not agreed on a cause. Card and McCall (1996) posited that employees who do not have medical insurance at the time of an injury that occurs while the employee is not at work, may be financially incentivized to claim that the injury was work-related. Claiming that the injury is work-related would

allow the employee to obtain medical coverage under the workers compensation policy which pays the full cost of medical care.

The findings of their analysis found that there was no relationship between the rates of workers compensation filing among groups of employees who were likely to have medical coverage and those who were not. However, Card and McCall (1996) were able to identify the existence of the Monday Effect, in which claims for hard to conceal injuries (sprains, strains and backaches), were higher on Monday than other days of the week. This is contrasted to claims for injuries of more visible and harder to conceal injuries which were consistently reported throughout the week. The researchers concluded that the only plausible explanation for the increase of Monday Effect claims on Mondays was that the injuries did happen at work, likely due to an employee being physically compromised from being inactive during the weekend.

It must be noted, however, that there were several limitations to Card and McCall's study. First, the researchers did not have access to the actual medical coverage status of the population they were studying. While they were able to use workers compensation claims data published by the Minnesota Department of Labor and Industry (1985 - 1989), for medical coverage status, they had to rely on a secondary data source, March Current Population Survey (CPS), which provided medical insurance coverage status for a representative sample of workers for the time period under analysis. Additionally, their data set did not include claims for injuries in which the employee was unable to work for four or more days because the Minnesota Department of Labor did not require such claims to be reported. Finally, as the researchers point out, simply having medical insurance may not be a disincentive for relying on workers compensation

insurance since some medical plans have substantial out of pocket cost share for employees. Therefore, when comparing behavior of the group with medical insurance to the group without medical insurance, the unknown variation in coverage provided within an individual's medical plan may weaken any observed relationship.

Card and McCall's study is contrasted with that of Dillender (2015) which studied the workers compensation claims filing habits of young adults in Texas. Dillender focused his analysis on young workers who at age 26, were no longer eligible for coverage on their parents' insurance plan. According to Dillender, this group was more likely to remain uninsured than other groups. Using data from the Texas Department of Insurance's Division of Workers' Compensation, which contained the nature of the claim, age of the claimant and cost of service, and date of service. Findings from this study suggests claims for injuries for which treatment could put off were largely impacted by an employee's health insurance coverage status.

These finding provide further support to Smith's assertion that injuries that were easy to conceal and for which immediate treatment was not required, were more likely than other types of claims to be filed under workers compensation in lieu of medical insurance. Dillender also suggested that lower cost claims were more sensitive to medical insurance coverage status which may indicate that treatment for acute conditions, rather than long lasting occupational conditions, contributed to the increase in claims among this population.

The combination of the support of the existence of Monday Effect Claims from Card and McCall's (1996) study and Dillender's findings that workers compensation claims for easy to conceal injuries were impacted by lack of medical insurance coverage

influenced the design of this study. Additionally, some of the limitations of Card and McCall's study highlighted the challenges of observing the relationship between the filing of Fraudulent Monday Effect Claims and the financial exposure created by an individual's health insurance coverage status as well as the design of the health insurance plan an individual may have access to.

Another influencing factor when designing this study, were the findings presented in a 2014 study commissioned by Aflac, a voluntary benefits insurance carrier, which stated that employers who provide an accident insurance plan to employees saw a reduction in workers compensation claims filing (Aflac, 2014). Accident Insurance pays an employee a cash benefit if he or she is injured due to a covered accident. While accident insurance plans are design to complement medical insurance plans, benefits are paid based on the occurrence of an accidental injury, according to a prescribed schedule of benefits, and does not coordinate with other coverages that an employee may have. Some accident plans only cover injuries while others cover both injuries that occur while an employee is engaged in work-related activities as well as when the employee is not engaged in work-related activities. When an employee is enrolled in an accident plan that covers job related injuries, the plans will also pay in addition to any benefits workers compensation may provide. The decision as to which kind of coverage to offer is made at the employer level.

Aflac's study is often quoted in the workers compensation and voluntary benefits industry as advisors are looking for ways to help employers reduce their workers compensation liability while providing their employees with valuable benefits that can be used cover out-of-pocket costs associated with accidental injuries (Nauman, 2015). A

later study by Guardian (2017), another insurance company, surveyed 1,500 people who were responsible for making decisions regarding their company's benefit program. Like Aflac's findings, Guardian found that 25% (1 in 4) of employers who offered an accident insurance program saw a decline in workers compensation claims (Guardian, 2017). That the findings are be based on survey or anecdotal data, does not negate the possible impact that accident insurance may have on employees' decisions to file fraudulent claims. Smith (1989) based his study on what he referred to as "oral tradition of workers compensation" and set forth on a journey to provide research-based evidence to the claim, and in doing so, opened the door for others to gain a better understanding of the phenomenon. In this study, I aim to do the same by further exploring the topic of Fraudulent Monday Effect Claims.

Due to the variances in finding among researchers regarding the cause of Monday Effect Claims, as well as the findings of the Aflac and Guardian studies which provides evidence of significant effects of accident insurance, I felt it was important to specifically explore the various factors that could contribute to an individual's decision to file a Fraudulent Monday Effect Claim (FMEC). As Smith (1989) stated, only a small portion of the Monday Effects claims may be fraudulent, 4% for strains and sprains and 1% for fractures. However, while these numbers may be small, given the large financial burden workers compensation costs imposes on employers, $98.6 billion dollars in 2018 (National Academy of Social Insurance, 2020), even a small reduction in the frequency of claims can have a significant impact for employers and insurers.

I suggest that the lack of consistency in finding on the cause of Monday Effect Claims may not be due to one specific factor, but rather a combination of factors. This

study aims to identify the various predictors of Fraudulent Monday Effect Claims. Fraudulent Monday Effect Claims are workers compensation claims filed for injuries that took place while an individual was not participating in work-related activities. Unlike the Monday Effect Claims Smith (1989) and others have studied, any claims filed in this study would be known to be fraudulent. In essence, the act of filing a workers compensation claim for an injury that occurred outside of work is an act of fraud. Prior research characterized this kind of action is both an opportunistic and a benefit fraud (Derrig & Krauss; 1994; Tennyson 2008, Tseng et al., 2014). While it is known that the prospects of mitigating one's financial losses can induce fraudulent action, there are also other aspects of a person's character, fraud acceptance (Tennyson, 2002) or satisfaction with their job (Hollinger & Clark, 1983; Holton, 2009) that may influence a person's decision to act fraudulently.

Each study participant was randomly assigned a scenario which included a combination of variables. The variables included injury type (sprain/easy to conceal versus fracture/hard to conceal), financial exposure, financial responsibility for paying for medical treatment based on medical and accident insurance coverage status), job satisfaction and fraud acceptability.

Discussion of Results

Hypothesis One - Injury Type

To test the effect of injury type on the likelihood that a Fraudulent Monday Effect Claim would be filed, each scenario began with the presentation of a non-work-related injury in which an individual fell while cleaning a ceiling fan at home during the

weekend. Half of the scenarios included "easy to conceal injuries" in which the subject sprained his or her ankle, and while in pain, was still able to walk.

"Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain."

The other half included "hard to conceal" injuries in which the scenario subject was unable to walk and likely suffered a fracture.

Sarah fell off a ladder while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she fractured her leg.

Based on prior research findings which confirmed the existence of Monday Effect Claims (Smith, 1989; Card & McCall, 1996; Campolieti & Hyatt, 2006; Butler, et al., 2014; Benjamin Hansen, 2016), I hypothesized that survey participants who received scenarios with easy to conceal injuries would be more likely to state that the scenario subject would file a Fraudulent Monday Effect Claim. According to Smith (1989), easy to conceal injuries are injuries in which an individual could delay care and wait until they got to work on Monday to file a claim. In the scenarios presented, an individual with a sprained ankle who is still able to walk can conceivably make it through the night and go in to work in the morning without getting immediate medical care. Easy to conceal injuries are contrasted with the "hard to conceal" injuries, in this case, an individual who cannot walk and has likely suffered a fracture. An individual who cannot walk would presumably have a more difficult time forgoing medical care until the next day as well as going into work with the injury undetected. An individual with a sprained leg may be able to muster up the energy to walk regularly for a short amount of time so that the injury may be undetected versus an individual who cannot walk at all would not have the

same advantage. For the Scenario Injury Type (ITS) variable, easy to conceal injuries were coded as "0" and hard to conceal injuries were coded as "1". Of the 507 participants, 258 received scenarios with "easy to conceal" injuries and 249 received scenarios with "hard to conceal" injuries.

Understanding that even with these thoughtfully constructed scenarios and the depiction of easy to conceal versus hard to conceal injuries, I felt it was important to include a check to confirm that study participants agreed with the characterization of the injuries. After answering the question as to whether the scenario subject would file a fraudulent Monday Effect Claim, participants were asked to characterize the nature of the injury presented in the scenario.

How would you characterize the injury presented in the scenario you just read?

Responses to this question ranged from 1 (very easy to conceal) to very hard to conceal. This variable was labeled at the Injury Type Perception (ITP). A correlation test was performed to ensure that study participants agreed with the nature and characteristic of the injuries as I intended them to be. Would participants agree that the sprain was an a "easy to conceal" injury and that the fracture was a "hard to conceal injury"?

Spearman's rho correlation, which measures the strength of relationships between sets of nonparametric data, revealed a moderate negative correlation between the injury type as intended to be presented in the scenario (ITS) and the participant's perception of the injury type (ITP) (r_s-.554, p=.000). I elected to test Hypothesis One (H1), which stated that participants who received scenarios with "easy to conceal" injuries would be more likely to say that the subject in the scenario would file a Fraudulent Monday Effect

Claim, using the participants perception of the Injury type (ITP). Once again, Spearman's rho correlation testing was used to test the relationship between Injury Type and the likelihood of a Fraudulent Monday Effect Claim filing. The relationship between the "Injury Type Perception", how the participant interpreted the injury presented in the scenario, revealed a significant correlation (r_s=-.272, p=0.000). Results are presented in Table 20 below.

Table 20

Fraudulent Monday Effect Claim (FMEC) and Injury Type Perception (ITP) Correlations

Correlations				
			FMEC	ITP
Spearman's rho	FMEC	Correlation Coefficient	1.000	.272
		Sig. (1-tailed)	.	.000
		N	507	507
	ITP	Correlation Coefficient	.271	1.000
		Sig. (1-tailed)	.000	.
		N	507	507

**. Correlation is significant at the 0.01 level (1-tailed).

The presence of a significant correlation (r_s=.272, p=.000) supports Hypothesis One and indicates that there is a positive relationship between injury type and the likelihood that a Fraudulent Monday Effect Claim will be filed. Easy to conceal injuries, such as a sprained ankle, which can conceivably be hidden and do not need immediate treatment (Smith 1989) are more likely to result in a Fraudulent Monday Effect Claim filing than a hard to conceal injury like a fractured leg which would be difficult to conceal upon entering the workplace on Monday and needed immediate medical attention.

Hypothesis Two - Financial Exposure

In each scenario, the individual's insurance coverage status was used as a proxy for financial exposure. For example, a scenario in which the subject scenario had both medical insurance and an accident plan, was coded as having very low financial exposure (1). An individual who had no medical insurance and no accident insurance was coded as having a very high financial exposure (4). Prior studies have shown that when individuals have health insurance coverage, they are less likely to file workers compensation claims. According to Bronchetti and McInerney (2017), the rate of workers compensation filings among their population of study decreased as their rates of medical insurance increase. Their findings indicate that obtaining medical insurance resulted in a change of behavior. It can be assumed that the financial protection provided by medical insurance negated the need for individuals to workers compensation claims. Additionally, changes in workers compensation filings support the assertion that there is a level of choice involved in the decision to file some workers compensation claims.

Once again, the theory of ex post moral hazard becomes relevant. Ex post moral hazard speaks to the actions of an individual once an injury or a loss has occurred (Stripling et al., 2018). In a situation where an individual does not have health insurance, there are subjected to the possibility of having a significant financial burden. Additionally, in some cases, even with medical insurance, an individual can still be left with high out of pocket costs. As the cost of medical care increases, employers and insurers pass on some or all the cost of the increase to employees, either in the form of premiums or the in the form of copays, deductible, and coinsurance. Without access to health insurance to obtain care, or with health insurance that have a high out of pocket

costs, employees are left to make choices as to how they will cover the cost of getting care. According to Baker-Goering (2019) some employees forego treatment, while others go into debt when electing to get treatment (Bickham & Lim, 2014). Then there are employees who may elect to rely on the medical coverage provided by workers compensation. However, doing so requires an act of fraud. A 1992 report by the Insurance Research Counsel found that approximately 8% of the public felt that filing a claim for workers compensation benefit for a claim that happened outside of work was acceptable (Derrig, 1994).

Given the insurance industry's seemingly general acceptance of the link between fraudulent workers compensation claims filing and health insurance coverage status, along with more recent findings of prior research (Dillender, 2015; Bronchetti & McInerney, 2017), I expected that participants who were presented with scenarios with high financial exposure from not having medical or accident coverage, would be more likely to state predict a Fraudulent Monday Effect Claim filing. However, the Spearman's rho correlation testing revealed that there was no significant relationship between Financial Exposure in the Scenario (FES) and the likelihood of a Fraudulent Monday Claim filing (FMEC), r_s=.03, p=.252. I also tested the relationship between participants' perception of financial exposure (FES) and the likelihood of a Fraudulent Monday Effect Claim filing and the analysis did not indicate a significant relationship between the two variables (r_s=.067, p=.065). These findings are consistent with that of Card and McCall's 1996 study, as well as Campolieti and Hyatt's 2006 study. While both studies acknowledged the existence of Monday Effect Claims, neither found a relationship between Monday Effect Claims and an individual's health insurance coverage status.

Relevant to some of the recent industry studies, I analyzed the specific impact of accident insurance on Fraudulent Effect Claims. The finding of my analysis indicated that there was no significant difference in Fraudulent Monday Effect Claim Filing rates between the group of participants who had Accident Insurance and the group what had no accident coverage. Results of the Mann-Whitney test provided no indication a statistically significant difference between the two groups (77.78), U=2715, Z=-.829, p=.407 (>.05). While these findings may not indicate that an individual's financial exposure, caused by their health insurance status, plays a role in deciding to participate in workers compensation fraud, it does leaves open the possibility that there may be other financial considerations that play into the decision.

However, the data shed some light on a very important question often asked in the industry. Most insurers have accident plans that cover job related injuries and plans that do not cover job related injuries. When job related injuries are covered, the accident plan pays benefits in addition to whatever benefits may be paid by workers compensation. This begs the questions of whether being covered by an accident plan will incent employees to file workers compensation claim in order to get benefits above and beyond their out-of-pocket costs. As previously discussed, most modern-day medical insurance plans are designed with employee cost share in the form of deductibles, copays and coinsurance that requires an employee to cover some of the cost of obtaining medical care. Sometimes the cost may be minimal for a Preferred Provider Organization (PPO) or Health Maintenance Organization (HMO) plan, but in the case of Consumer Driven Health Plans (CHDP) the deductible can by as much as $5,000 for an individual with an out-of-pocket amount as determined by the IRS (Claxton et al., 2019)

For employees who must rely on medical insurance to cover the cost of their injuries, having an accident insurance plan will provide them with cash benefits that they can use towards their out-of-pocket cost. However, the cost of obtaining medical treatment is covered by workers compensation, the employee will have no out-of-pocket cost and any benefits paid by the accident plan will be in excess of the cost of treatment. According to Cummins and Tennyson (1996) the situation in which an individual will be compensated amounts beyond their loss provide an incentive to participate in fraudulent behavior.

To explore the effect that having accident insurance that provides on the job coverage, versus accident insurance that only provided coverage for off job injuries, can have on the filing of Fraudulent Monday Effect Claims, Spearman's rho correlation testing and a Mann Whitney U test were performed. It should be noted that the focus of this study is specifically injuries that occurred outside of the job and that every participant was presented with a scenario in which the injury took place outside the workplace. Results of the correlation testing, as presented in Table 21 below revealed a statistically significant positive correlation between the type of accident insurance presented and the likelihood of a Fraudulent Monday Effect Claim filing, r_s=.105, p=.009. This finding indicated that the type of accident plans presented in the scenario may have the level of Fraudulent Monday Effect Claim filing.

Table 21

Fraudulent Monday Effect Claim (FMEC) and Accident Insurance Type (ACCTYP) Correlations

Correlations				
			FMEC	ACCTYP
Spearman's rho	FMEC	Correlation Coefficient	1.000	.105**
		Sig. (1-tailed)	.	.009
		N	507	507
	ACCTYP	Correlation Coefficient	.105**	1.000
		Sig. (1-tailed)	.009	.
		N	507	507

**. Correlation is significant at the 0.01 level (1-tailed).

Mann Whitney U test was conducted to see the distinct difference between the group with on-the-job coverage accident insurance and the group with on-and-off-the-job accident coverage. Results of the analysis, as displayed in Table 22, showed a statistically significant difference in Monday Effect Claim filing among the group with accident insurance plans that only provided coverage for injuries that occurred off the job (158.35) and the group presented with scenarios that include accident insurance plans that provided coverage for occupational related injuries (182.59), U=11974, Z=-2.327, p=.020 (<.05).

Table 22

Fraud Fraudulent Monday Effect Claim (FMEC) and Accident Insurance Type (ACCTYP) Mann Whitney

Ranks				
	ACCTYP	N	Mean Rank	Sum of Ranks
FMEC	Off Job Only	189	158.35	29929.00
	On & Off Job	148	182.59	27024.00
	Total	337		

Test Statistics[a]	
	FMEC
Mann-Whitney U	11974.000
Wilcoxon W	29929.000
Z	-2.327
Asymp. Sig. (2-tailed)	.020

a. Grouping Variable: ACCTYP

Combined, these findings indicate that while financial exposure caused by insurance coverage status (medical and/ or accident) may not be tied to Fraudulent Monday Effect Claims filing, accident insurance that provide coverage for job related injuries may be more induced to file a Fraudulent Monday Effect Claim. This is consistent with Cummins and Tennyson's assertion that the opportunity to receive compensation over and above the loss, may encourage individuals to act in a fraudulent manner. Therefore, when employers and insurers are considering what types of plans to offer employees, they may want to offer accident plans that only provide coverage for nonoccupational injuries.

Hypothesis Four - Fraud Acceptance

Another important aspect of this research is the analysis of the role of Fraud Acceptance in the filing of Fraudulent Monday Effect Claims. Hypothesis 4 (H4) posited that a person's willingness to say that a Fraudulent Monday Effect Claim would be filed will have a direct link to the individual's Fraud Acceptability score. Adapted from a

validated scale developed by Tennyson (2002), Fraud Acceptance was measured using 5 questions which asks whether participants agree with 5 specific fraudulent activities: inflating claims, misrepresenting the nature of an accident, misrepresenting facts to get coverage or lower rates, submitting claims for injuries that occurred to the accident, falsifying receipts to increase settlement amounts.

In an earlier study, Cummins and Tennyson (1996) used data from Insurance Research Council's 1991 survey and found that states with higher levels of fraud acceptance had a higher level of car insurance fraud. Relying on fraud acceptance attitudes of the public presented in Insurance Research Council 1995 survey, and using a similar model as Tennyson, Colquitt and Hoyt (1997) reached similar conclusion when studying the impact of fraud acceptance in the life insurance industry. Based on these prior findings, I predicted that individuals with a high Fraud Acceptance score would be more likely to say that the scenario subject will file a Fraudulent Monday Effect Claim than an individual with a low fraud acceptability score. The result of the Spearman's rho correlation test indicates that there was a significant positive, relationship between Fraud Acceptability Score and the likelihood of a Fraudulent Claim filing (r_s=.195, p=.000). Although weak, the relationship may provide evidence that individuals with high fraud acceptability scores will be more likely to engage in fraudulent activity, such as filing a Fraudulent Monday Effect Claim.

CHAPTER VII

CONCLUSION

In this section of the paper, I will discuss actions employers and insurers can take that may reduce Fraudulent Monday Effect claims.

Suggestions for Employers and Insurers

Understanding the difficulty with assessing the cause of Monday Effect Claims and discovering the exact level of fraud within the claims filing patterns, this research was design to specifically analyze what factors may drive an individual to file a Fraudulent Monday Effect Claim. In addition to the goal of identifying predictive factors, the goal of this study was to provide employers with tangible suggestions for actions that can be taken to possibly reduce the frequency of Fraudulent Monday Effect Claims. As previously noted, even Smith agreed that the percentage of Fraudulent Monday Effect Claims was not a large amount, 4% of Monday Effect Claims filed. However, based on the overall cost of workers compensation to employers, a saving of 4% could be impactful.

Using a scenario-based survey, participants were randomly presented with one scenario which included specified combinations of variables of study: injury type, the insurance coverage status as a proxy for financial exposure, job satisfaction and the individual's level of fraud acceptability. The findings of this research indicate that there are several factors that may influence an individual's decision to file a Fraudulent Moday Effect claim:

Injury Type: Easy to Conceal

Type of Accident Plan: On & Off the Job Coverages

Fraud Acceptability: High

Effectively investigate claims for easy to conceal injuries

The literature characterizes "easy to conceal" injuries as strains and sprains. Also referred to as difficult to diagnose injuries, these injuries typically do not require immediate care and can also be hidden (Smith, 1989; Card & McCall, 1996; Campolieti & Hyatt, 2006; Benjamin Hansen, 2016; Butler, Kleinman & Gardner, 2014). Prior studies have found that workers compensation claims filed for these injuries tend to be higher on Mondays, when most employees are returning to work after the weekend, than any other type of claim. This is contrasted with difficult to conceal injuries, such as fractures and lacerations, which cannot be easily hidden from employers and may require immediate attention. The frequency of claims for hard to conceal injuries tend stay consistent throughout the week. This observation has led some researchers, as well as many in the insurance industry, to believe that a portion claims filed on Monday for easy to conceal and hard to diagnose injuries are fraudulent (Smith, 1989; Aflac 2014, Guardian, 2020). These types of claims are referred to as Monday Effect Claims.

The likelihood that employees who suffered easy to conceal injuries at home, while not at work, are more likely to file Fraudulent Monday Effect Claims, when compared to employees whose nonoccupational injury results in an injury that is difficult to conceal, should cause employers to investigate Monday Effect Claims more

effectively. When presented with a claim that can be categorized as a Monday Effect Claim, employers should pay particular attention to the following:

- *Is the claim for an easy to conceal injury filed on a Monday or any day that a person first returns to work, after a holiday or scheduled time off?*
- *Is the claim for easy to conceal injuries where there are no witnesses?*
- *Do the medical details match up with the employee's characterization of the cause of the injury?*

Offer Accident Insurance plans with Off the Job coverage only

Accident Insurance provides cash benefits to employees who need to obtain medical care due to a covered accident. While some plans have exclusions, such as self-inflicted injuries and injuries that occur during a commission of a crime, most injuries are covered. Accident plans will pay benefits in addition to what an employee's medical insurance plan may cover, providing employees with cash that can be used to cover their out-of-pocket costs of obtaining care or recuperating from an injury.

Some benefit professionals whole heartedly believe that offering accident insurance plans to employees will reduce workers compensation claims, due to the reduction in fraudulent claims. Still, others are concerned that given the opportunity to get additional benefits that remove or mitigate the financial exposure for employees, they would either see an increase in medical claims or a perhaps even an increase in workers compensation claims. While this study cannot answer the questions of the impact on medical claims filed, the variance between Fraudulent Monday Effect filing rates for

scenarios with accident plans that covered occupational injuries versus plans that did not, is reason to think twice about the designs of the plans that are offered.

Employers will often have a choice as to whether they offer an accident insurance plan that covers both occupational and non occupation injuries. Given the possibility that plans that pay benefits in addition to the benefits provided by workers compensation may incentivize employee to file a Fraudulent Monday Effect Claim, employers may consider only offering accident insurance plans that provides coverage for nonoccupational injuries. Additionally, when offering accident insurance plans that only cover occupational injuries, employers should ensure that the benefits offered within their plans do not significantly exceed the employee cost share built into their medical plan designs.

Proactively Identify employees and candidates with high level of Fraud Acceptability through the use of Integrity Testing

Integrity tests may be used to predict which job candidates may be likely to engage in undesirable behavior such as theft, drug use and other dishonest behavior (Celena et. at., 2012; Sturman & Sheryn, 2009). There are two types of integrity tests: overt and personality-based or covert. Overt tests ask directly questions about an employee's attitude about negative and counterproductive behavior (Sturman & Sheryn, 2009) while covert tests measure and assess personality characterizes that are linked to the unwanted behaviors (Celena et. at., 2012).

One popular integrity test is the Tescor Survey (Celena et at., 2012) which is made up of 73 questions, 60 of which are directly tied to the attitudes under study, while 13 are filler questions. The four subscales included in the survey are substance abuse,

faking, hostility, and theft. A failing score on any of the subscales will identity an applicant as high risk and therefore, a job offer would not be extended. Other than Tescor Survey other tests available to employers are the Reid Report, the Stanton Survey, and the Personnel Selection Inventory. One concern about integrity testing is the thought that it may violate employment laws. However, according to Struman and Sherwyn (2009), prior research had shown that that protected groups are not adversely impacted.

As previously discussed, individuals who have high Fraud Acceptability scores may be more likely to file a Fraudulent Monday Effect Claim. The filing of a fraudulent workers compensation claim can be characterized as unwanted, undesirable, or counterproductive behavior. Prior research has found that integrity tests have been successful at proactively identifying potential employees who, once hired, may be likely to engage in such behaviors. By screening out such applicant's, employers may be able to reduce the occurrence of Fraudulent Monday Effect Claims, thereby, reducing their overall workers compensation claims cost. While there is not a large amount of research done in this area, employers may want to consider the use of such tests in their hiring practices.

Implications for Moral Hazard Theory

This research adds to the understanding and development of the theory of moral hazard by identifying specific factors that may increase or reduce moral hazard. Additionally, it encourages researchers to contemplate whether moral hazard should be viewed in context of individual events or a broader context of an individual's total financial picture and exposure.

Moral hazard is caused by the asymmetry of information between the insured and the insurer (Stripling et al., 2018; Götze & Gürtler, 2020). When an individual files a workers compensation claim for an easy to conceal injury, the employer and insurer usually have no definitive way to know when, how and where the injury occurred and is, therefore, reliant on the employee to provide this information. As previously discussed, ex post moral hazard dictates that once faced with the prospect of a financial loss, an individual may act in ways that will minimize said loss (Cummins & Tennyson,1996). Regarding the topic of Fraudulent Monday Effect Claims, employees who are injured outside of work and are faced with covering all or part of the cost of obtaining medical care, either due to not having insurance or believing that their insurance does not provide adequate protection, may decide to rely on workers compensation to cover the cost of their care. While many medical insurance plans require individuals to cover a portion of the cost of medical treatment, workers compensation covers the entire cost of medical treatment for work-related injuries.

In order to file a worker compensation claim for a non-work-related injury, an individual would need to actively make the decision to engage in an act of fraud. Some individuals may engage in fraud by completing a claim form and making fraudulent statements, but some may go as far as acting out the "injury" so to have witnesses. This asymmetry of information allows for the existence of moral hazard, which in many cases puts insurers and employers at a disadvantage. Therefore, it is incumbent upon researchers to have a clear understanding of the theory of moral hazard and factors that can increase or reduce moral hazard.

This study contributes to the body of work that finds that injury type will predict the likelihood of a fraudulent insurance claim being filed. When considering injury type, one can clearly see the asymmetry in information that creates the existence of moral hazard. When evaluating the effect of easy to conceal Injuries, like strains and sprains, compared to difficult to conceal Injuries like fractures or lacerations, it is easy to see that asymmetry of information is less likely to exist with a difficult to conceal injury. An employee walking in to work with a noticeable limp or an obvious evidence of a wound is more likely to draw the attention of coworkers and managers and would, therefore, not have the advantage of being able to hide the existence or nature of their injury. Therefore, the individual with a difficult to conceal injury, knowing that he or she is unlikely to hide the nature or provenance on their injury, may be less likely to attempt file a Fraudulent Monday Effect Claim. Individuals with easy to conceal injuries have a greater opportunity to hide their injury and convincingly present their injury as having occurred at work, rather than where and when it occurred.

Inconsistent with prior studies on moral hazard, the findings of this study revealed that financial exposure did not impact the likelihood that a Fraudulent Monday Effect Claim would be filed. When it comes to financial loss, research has found that an individual is more likely to participate in fraud in order to mitigate their financial loss (Tennyson, 2008; Götze & Gürtler, 2020). I hypothesized that higher levels of financial exposure, created by lack of medical and accident insurance coverage and cost share design, would be more likely to be tied to Fraudulent Monday Effect Claims filing because higher financial exposure represented a greater risk of loss. This hypothesis was unsupported.

In reviewing the variance between my findings and that of prior research, I had to consider whether the evaluation of the factors that contribute to moral hazard should be reassessed. Research tends to look at the existence and impact of moral hazard based on individual events - for example, an individual car accident or an individual injury. However, it is more plausible to believe that when confronted with financial loss, individuals are more likely to assess their entire financial situation and exposure and not just the impact of a single event. In the example of Fraudulent Monday Effect Claims, an individual suffers an injury outside of work and is faced with the possibility of having to pay for their medical bills. Smith (1989) posited that the existence of information asymmetry creates the condition of moral hazard and that individuals may decide to come to work and file a claim. However, when it comes to work-related circumstances, an employee may be more likely to assess their options of future actions based on their total financial picture and risk, which includes having a job and an income, instead of the financial loss that may be created by the single injury.

Additionally, filing a workers compensation claim is not the only way an individual can obtain medical treatment without paying the cost of care. An individual may elect to obtain care from an emergency room or other medical institution and decide not to pay the bill. While numbers have steadily declined since the passage of the Affordable Care Act which made medical coverage available to millions of uninsured Americans, research shows that there is still many Americans who are unable to pay their medical bills. Research presented by the National Center for Health Statistics, show that through the first half of 2017, 16% of people under the age of 65 belong to families who were having difficulty medical debt (Cohen et al., 2017). Additionally, 12.3% of

individuals who had private insurance, presumably though an employer, also reported having medical debt. These revelations support to the assertion that when faced financial loss due to having to pay for medical care, individuals may elect other options available to them rather than filing fraudulent workers compensation claims.

As there is seemingly no direct employment related consequence for having outstanding medical bills, an individual is clearly at greater risk of losing their financial security by filing a Fraudulent Monday Effect Claim than they are at not paying a hospital bill. Being caught filing a fraudulent workers compensations claim carries severe penalties including prosecution, loss of employment and income (Tennyson, 2008). Risking getting caught committing fraud in order to save a few thousand dollars of medical cost may not be worth risking their entire salary and livelihood.

When viewing moral hazard in a broader context, once can see why regardless of the financial loss that may be created by an individual injury, employees may be less likely to make the decision to engage in fraud that may impact their job and financial security. If ex post moral hazard dictates that individuals will engage in actions to mitigate their financial loss, we can posit that engaging in fraudulent activity which may cause loss of job and income, can increase financial exposure rather than decreasing it, thereby understanding why financial exposure created by a single non-work-related injury may not impact an individual's decision to file a Fraudulent Monday Effect Claim.

In closing, when attempting to measure the impact of moral hazard, researchers and industry professionals should consider the totality of an individual's financial exposure rather than the financial exposure created by an individual event of loss.

Implications for Employers and Insurers

Workers Compensation represents a significant cost to employers, approximately $98.6 billion in 2018 (National Academy of Social Insurance, 2020). Of the $98.6 billion quoted above, $62.9 billion represented the cost of benefits paid $31.3 billion for medical benefits and 31.6 billion for cash disability benefits.

While insurers are able to adjust premiums, they charge employers to absorb economic loss due to fraudulent activities, employers have very few ways to impact their cost of offering this mostly mandated coverage. Fraudulent workers compensation claims cost employers in the form of higher premiums (Leigh, 2011). Since, in most states, employer bear the cost of providing workers compensation coverage, employers need fully understand the impact of fraudulent claims and how losses can be mitigated by preventing and identifying these kinds of claims, including Fraudulent Monday Effect Claims.

Fraudulent Monday Effect Claims are workers compensation claims filed on Mondays, or the day an employee returns to work, for injuries that occurred outside of work. These injuries tend to be soft tissue injuries like sprains and strains, which can be easily concealed, hard to diagnose and does not require immediate treatment. According to Robert Smith (1989), 4% of claims for easy to conceal injury may be fraudulent. Smith further concluded that it is likely, based on the finding of his study, that as much as 2% of all claims for lacerations, fractures, strains, and sprains may represent claims for instances where non-work-related injuries were passed off as work-related injuries.

According to the National Academy of Social Insurance (2020) there were 2.83 million claims reported filed for nonfatal injuries. As presented in Table 23 below,

strains, sprains, and tears were the most commonly reported which represented about one third of all claims filed. Claims for pain, including back pain and soreness represented 17.8% of total claims and fractures, bruises, and contusions each represented about 8.8% of non-fatal claims filed. The total percentage of nonfatal claims filed for 2018 was 50.8% which equates to roughly 1.4 million claims filed for Easy to Conceal Injuries.

Table 23

Estimated 2018 Claims for Easy to Conceal Injuries

	% of claims filed	Number of Claims filed
Strains, sprains & tears	33.0%	924,000
Pain and soreness	17.8%	498,400
Total	50.8%	1,422,400

Source: National Academy of Social Insurance estimates (2020); Based on 2.83M total claims

According to the National Academy of Social Insurance in 2016 non-fatal injuries, which are relatively rare, represented approximately 3% of workers compensation benefits paid out. If these numbers, as presented in Table 24, were to hold true for 2018, it would be expected that approximately 97 percent of benefits paid were for nonfatal injuries, equating to $61 billion dollars in claims. Given that there were approximately $2.83 million claims for nonfatal injuries files the average cost per claim is $21,790 which equates to a total benefit cost for nonfatal claims reported for strains, sprains, tears, pain, and soreness of $30.1 billion dollars.

Table 24

Estimated 2018 Total Cost of Benefits for Nonfatal Easy to Conceal Injuries

Total Cost of Benefits	$62,900,000,000
Total Cost of Nonfatal Benefits	$61,013,000,000
Number of Nonfatal Claims	2,800,000
Average benefits cost per nonfatal claim	$21,790
Total % of claims for Easy to Conceal Injuries	50.8%
Total # of claims for Easy to Conceal Injuries	1,422,400
Total cost of Claims for Easy to Conceal Injuries	$30,994,604,000

Source: National Academy of Social Insurance Estimates (2020)

If, as Smith (1989) noted, fraudulent claims represent 4% of claims filed for easy to conceal injuries, the calculated cost of Fraudulent Monday Effect Claims is $1.2 billion. While this number only represents 2% of the total claims cost of nonfatal injuries reported, it still represents a significant amount of waste. These are funds that can be used to increase employee pay, offer more robust benefits, or invested into the growth and operation of the company. Bearing in mind that Fraudulent Monday Effect Claims represent only a subset of fraudulent workers compensation claims, this illustration, as presented in Table 25 below, shows how much of an economic impact workers compensation fraud can have on employers and why they should find ways to discourage employees from engaging in such activity.

Table 25

Estimated 2018 Total Cost of Fraudulent Monday Effect Claims

Total # of claims for Easy to Conceal Injuries	1,422,400
Average benefits cost per nonfatal claim	$21,790
Total cost of Claims for Easy to Conceal Injuries	$30,994,604,000
% of Fraudulent Claims	4%
Total Cost of Fraudulent Claims	$1,239,784,160

In conclusion, whether it be offering robust medical insurance, accident insurance or having job candidates take ethic test, actively engaging in strategies that will lessen workers compensation fraud will benefit employers and their employees.

Limitations

There were several limitations to this study. Regarding the types of injuries illustrated in the study, in addition to sprains and strains, lacerations should have been included. A significant laceration may have conveyed a more serious injury that would require immediate attention. Additionally, more descriptive words should be used to better convey the nature of the injury as it related to ease of concealment and whether immediate care is needed. I made the conscious choice not to use the terms “easy to conceal” or “difficult to conceal” in the scenarios as to not impact the responses of participants. However, seeing that the correlation testing yielded a stronger effect when the participant’s perception of the injury (ITP) versus the injury type I intended to convey (ITS), I believe that a clearer description of the injury type would lead to a better analysis.

I also consider whether I should have clearly stated which scenarios were representative of high financial exposure versus low financial exposure as there was some variance between participants’ perception of the financial exposure (FEP) presented in the scenario and the intended financial exposure of the scenario (FES). While many Americans access healthcare through insurance plans, many are still unclear as to how insurance works and how financial exposure is impacted by the types and design of the insurance plans.

Finally, future studies of this type should be sure to use a sample that is more representative of the US population, particularly in terms of education and income. According to Tennyson (2002), citing prior research, attitudes of fraud vary across demographic and that women, the highly educated, and elderly tend to be less accepting of fraud. Participants of this study fall heavily within these demographic groups. Additionally, the fraud acceptance rate in this study is significantly lower than what has been presented in some national studies. Tennyson posited that individuals are likely to be reluctant to admit that they would take part in deviant behavior (Tennyson, 2002). Given the personal nature of the way in which participants were solicited, using my personal and academic Facebook connections, I expect that this may be an influencing factor. However, giving that statistically significant relationships were found in this study, one would only expect that even stronger correlations would be present with a sample that had no personal connection to the researcher.

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APPENDICES

Vignettes and Survey Questions

Step 1 : Each participant will be randomly assigned one of the following vignettes.

	Injury Type: Easy to Conceal Injury	Injury Type: Hard to Conceal Injury
Medical Insurance Type: None Accident Insurance Type: None	Injury Type: Easy to Conceal Injury Medical Insurance Type: None Accident Insurance Type: None Gender: Male 1. Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain. Mark doesn't currently have health insurance and would need to pay the full cost for any medical care. However, Mark knows that if he sprained his ankle at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.	Injury Type: Hard to Conceal Injury Medical Insurance Type: None Accident Insurance Type: None Gender: Male 2. Mark fell off a ladder while cleaning his ceiling fans and cannot walk. Mark is in a lot of pain and thinks he fractured his leg. Mark doesn't currently have health insurance and would need to pay the full cost for any medical care. However, Mark knows that if he broke his leg at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.
<u>Medical – HDHP</u> Accident - None	Injury Type: Easy to Conceal Injury Medical Insurance Type: <u>HDHP</u> Accident Insurance Type: None Gender: Male 3. Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain. His current medical plan has a deductible of $1,350 which requires Mark to pay $1,350 out of pocket before the insurance will cover any cost of his medical care. However, Mark knows that if he sprained his ankle at work his employer's Workers Compensation	Injury Type: Hard to Conceal Injury Medical Insurance Type: <u>HDHP</u> Accident Insurance Type: None Gender: Male 4. Mark fell off a ladder while cleaning his ceiling fans and cannot walk. Mark is in a lot of pain and thinks he fractured his leg. His current medical plan has a deductible of $1,350 which requires Mark to pay $1,350 out of pocket before the insurance will cover any cost of his medical care. However, Mark knows that if he broke his leg at work his employer's Workers Compensation

	insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.	insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.
Medical - PPO Accident - None	Injury Type: Easy to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: None Gender: Male 5. Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain. His current medical plan requires Mark to pay a $40 copay for a doctor's visit or $100 copay for an Emergency Room visit. His medical insurance plan will cover the rest of his medical cost. However, Mark knows that if he sprained his ankle at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs	Injury Type: Hard to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: None Gender: Male 6. Mark fell off a ladder while cleaning his ceiling fans and cannot walk. Mark is in a lot of pain and thinks he fractured his leg. His current medical plan requires Mark to pay a $40 copay for a doctor's visit or $100 copay for an Emergency Room visit. His medical insurance plan will cover the rest of his medical cost. However, Mark knows that if he broke his leg at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.
Medical – None Accident – Off Job Coverage	Injury Type: Easy to Conceal Injury Medical Insurance Type: None Accident Insurance Type: Off Job Gender: Male 7. Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain. Mark doesn't currently have health insurance and would need to pay the full cost for any medical care. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits for the medical diagnosis and treatment for an injury that	Injury Type: Hard to Conceal Injury Medical Insurance Type: None Accident Insurance Type: Off Job Gender: Male 8. Mark fell off a ladder while cleaning his ceiling fans and cannot walk. Mark is in a lot of pain and thinks he fractured his leg. Mark doesn't currently have health insurance and would need to pay the full cost for any medical care. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits for the medical diagnosis and treatment for an injury that

	occurs outside of work. For example, Mark would get up to $200 for his initial visit to the doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured ankle. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. However, Mark knows that if he sprained his ankle at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.	occurs outside of work. For example, Mark would get up to $200 for his initial visit to the doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured leg. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. However, Mark knows that if he broke his leg at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.
<u>Medical – HDHP Accident – Off Job</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: HDHP Accident Insurance Type: Off Job Gender: Male 9. Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain. His current medical plan has a deductible of $1,350 which requires Mark to pay $1,350 out of pocket before the insurance will cover any cost of his medical care. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits for the medical diagnosis and treatment for an injury that occurs outside of work. For example, Mark would get up to $200 for his initial visit to the	Injury Type: Hard to Conceal Injury Medical Insurance Type: HDHP Accident Insurance Type: Off Job Gender: Male 10. Mark fell off a ladder while cleaning his ceiling fans and cannot walk. Mark is in a lot of pain and thinks he fractured his leg. His current medical plan has a deductible of $1,350 which requires Mark to pay $1,350 out of pocket before the insurance will cover any cost of his medical care. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits for the medical diagnosis and treatment for an injury that occurs outside of work. For example, Mark would get up to $200 for his initial visit to the

	doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured ankle. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. However, Mark knows that if he sprained his ankle at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs	doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured leg. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. However, Mark knows that if he broke his leg at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.
<u>Medical - PPO Accident – Off Job</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: Off Job Gender: Male 11. Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain. His current medical plan requires Mark to pay a $40 copay for a doctor's visit or $100 copay for an Emergency Room visit. His medical insurance plan will cover the rest of his medical cost. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits for the medical diagnosis and treatment for an injury that occurs outside of work. For example, Mark would get up to $200 for his initial visit to the doctor or emergency room.	Injury Type: Hard to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: Off Job Gender: Male 12. Mark fell off a ladder while cleaning his ceiling fans and cannot walk. Mark is in a lot of pain and thinks he fractured his leg. His current medical plan requires Mark to pay a $40 copay for a doctor's visit or $100 copay for an Emergency Room visit. His medical insurance plan will cover the rest of his medical cost. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits for the medical diagnosis and treatment for an injury that occurs outside of work. For example, Mark would get up to $200 for his initial visit to the doctor or emergency room.

	Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured ankle. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. However, Mark knows that if he sprained his ankle at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.	Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured leg. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. However, Mark knows that if he broke his leg at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.
<u>Medical – None</u> <u>Accident – On & Off Job</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: None Accident Insurance Type: On & Off Job Gender: Male 13. Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain. Mark doesn't currently have health insurance and would need to pay the full cost for any medical care. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits when he gets medical treatment for an injury that occurs at work or outside of work. For example, Mark would get up to $200 for his initial visit to the doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured ankle. The accident plan will also pay Mark $40 per physical therapy	Injury Type: Hard to Conceal Injury Medical Insurance Type: None Accident Insurance Type: On & Off Job Gender: Male 14. Mark fell off a ladder while cleaning his ceiling fans and cannot walk. Mark is in a lot of pain and thinks he fractured his leg. Mark doesn't currently have health insurance and would need to pay the full cost for any medical care. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits when he gets medical treatment for an injury that occurs at work or outside of work. For example, Mark would get up to $200 for his initial visit to the doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured leg. The accident plan will also pay Mark $40 per physical therapy session for

	session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. For work-related injuries, the accident plan will pay cash benefits even if Mark received benefits from other sources, including workers compensation. However, Mark knows that if he sprained his ankle at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.	up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. For work-related injuries, the accident plan will pay cash benefits even if Mark received benefits from other sources, including workers compensation. However, Mark knows that if he broke his leg at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.
Medical – HDHP <u>Accident – On & Off Job</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: HDHP Accident Insurance Type: On & Off Job Gender: Male 15. Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain. His current medical plan has a deductible of $1,350 which requires Mark to pay $1,350 out of pocket before the insurance will cover any cost of his medical care. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits when he gets medical treatment for an injury that occurs at work or outside of work. For example, Mark would get up to $200 for his initial visit to the doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were	Injury Type: Hard to Conceal Injury Medical Insurance Type: HDHP Accident Insurance Type: On & Off Job Gender: Male 16. Mark fell off a ladder while cleaning his ceiling fans and cannot walk. Mark is in a lot of pain and thinks he fractured his leg. His current medical plan has a deductible of $1,350 which requires Mark to pay $1,350 out of pocket before the insurance will cover any cost of his medical care. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits when he gets medical treatment for an injury that occurs at work or outside of work. For example, Mark would get up to $200 for his initial visit to the doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were

	diagnosed with a fractured ankle. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. For work-related injuries, the accident plan will pay cash benefits even if Mark received benefits from other sources, including workers compensation. However, Mark knows that if he sprained his ankle at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.	diagnosed with a fractured leg. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. For work-related injuries, the accident plan will pay cash benefits even if Mark received benefits from other sources, including workers compensation. However, Mark knows that if he broke his leg at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.
<u>Medical – PPO Accident – On & Off Job</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: On &Off Job Gender: Male 17. Mark fell off a ladder while cleaning his ceiling fans and sprained his ankle. He can walk but he is in a lot of pain. His current medical plan requires Mark to pay a $40 copay for a doctor's visit or $100 copay for an Emergency Room visit. His medical insurance plan will cover the rest of his medical cost. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits when he gets medical treatment for an injury that occurs at work or outside of work. For example, Mark would get up to $200 for his initial visit to the	Injury Type: Hard to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: On &Off Job Gender: Male 18. Mark fell off a ladder while cleaning his ceiling fans and cannot walk. Mark is in a lot of pain and thinks he fractured his leg. His current medical plan requires Mark to pay a $40 copay for a doctor's visit or $100 copay for an Emergency Room visit. His medical insurance plan will cover the rest of his medical cost. Mark remembers that he signed up for an Accident Insurance plan at work which will pay him cash benefits when he gets medical treatment for an injury that occurs at work or outside of work. For example, Mark would get up to $200 for his initial visit to the

	doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured ankle. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. For work-related injuries, the accident plan will pay cash benefits even if Mark received benefits from other sources, including workers compensation. However, Mark knows that if he sprained his ankle at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs	doctor or emergency room. Additionally, the accident plan will pay Mark $1,000 if he were diagnosed with a fractured leg. The accident plan will also pay Mark $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Mark and he can use the cash for any reason, including covering the cost of his medical treatment. For work-related injuries, the accident plan will pay cash benefits even if Mark received benefits from other sources, including workers compensation. However, Mark knows that if he broke his leg at work his employer's Workers Compensation insurance would cover the cost of his medical care and he would not have any out of pocket medical costs.
Medical Insurance Type: None Accident Insurance Type: None	Injury Type: Easy to Conceal Injury Medical Insurance Type: None Accident Insurance Type: None Gender: Female 19. Sarah fell off a ladder while cleaning her ceiling fans and sprained her ankle. She can walk but she is in a lot of pain. Sarah doesn't currently have health insurance and would need to pay the full cost for any medical care. However, Sarah knows that if she sprained her ankle at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.	Injury Type: Hard to Conceal Injury Medical Insurance Type: None Accident Insurance Type: None Gender: Female 20. Sarah fell off a ladder while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she fractured her leg. Sarah doesn't currently have health insurance and would need to pay the full cost for any medical care. However, Sarah knows that if she broke her leg at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.
<u>Medical – HDHP</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: <u>HDHP</u>	Injury Type: Hard to Conceal Injury Medical Insurance Type: <u>HDHP</u>

Accident - None	Accident Insurance Type: None Gender: Female 21. Sarah fell off a ladder while cleaning her ceiling fans and sprained her ankle. She can walk but she is in a lot of pain. Her current medical plan has a deductible of $1,350 which requires Sarah to pay $1,350 out of pocket before the insurance will cover any cost of her medical care. However, Sarah knows that if she sprained her ankle at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.	Accident Insurance Type: None Gender: Female 22. Sarah fell off a ladder while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she fractured her leg. Her current medical plan has a deductible of $1,350 which requires Sarah to pay $1,350 out of pocket before the insurance will cover any cost of her medical care. However, Sarah knows that if she broke her leg at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.
Medical - PPO Accident - None	Injury Type: Easy to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: None Gender: Female 23. Sarah fell off a ladder while cleaning her ceiling fans and sprained her ankle. She can walk but she is in a lot of pain. Her current medical plan requires Sarah to pay a $40 copay for a doctor's visit or $100 copay for an Emergency Room visit. Her medical insurance plan will cover the rest of her medical cost. However, Sarah knows that if she sprained her ankle at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.	Injury Type: Hard to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: None Gender: Female 24. Sarah fell off a ladder while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she fractured her leg. Her current medical plan requires Sarah to pay a $40 copay for a doctor's visit or $100 copay for an Emergency Room visit. Her medical insurance plan will cover the rest of her medical cost. However, Sarah knows that if she broke her leg at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.
Medical – None	Injury Type: Easy to Conceal Injury Medical Insurance Type: None	Injury Type: Hard to Conceal Injury Medical Insurance Type: None

Accident – Off Job Coverage	Accident Insurance Type: Off Job Gender: Female 25. Sarah fell off a ladder while cleaning her ceiling fans and sprained her ankle. She can walk but she is in a lot of pain. Sarah doesn't currently have health insurance and would need to pay the full cost for any medical care. Sarah remembers that she signed up for an Accident Insurance plan at work which will pay her cash benefits for the medical diagnosis and treatment for an injury that occurs outside of work. For example, Sarah would get up to $200 for her initial visit to the doctor or emergency room. Additionally, the accident plan will pay Sarah $1,000 if she were diagnosed with a fractured ankle. The accident plan will also pay Sarah $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Sarah and she can use the cash for any reason, including covering the cost of her medical treatment. However, Sarah knows that if she sprained her ankle at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.	Accident Insurance Type: Off Job Gender: Female 26. Sarah fell off a ladder while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she fractured her leg. Sarah doesn't currently have health insurance and would need to pay the full cost for any medical care. Sarah remembers that she signed up for an Accident Insurance plan at work which will pay her cash benefits for the medical diagnosis and treatment for an injury that occurs outside of work. For example, Sarah would get up to $200 for her initial visit to the doctor or emergency room. Additionally, the accident plan will pay Sarah $1,000 if she were diagnosed with a fractured leg. The accident plan will also pay Sarah $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Sarah and she can use the cash for any reason, including covering the cost of her medical treatment. However, Sarah knows that if she broke her leg at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.
Medical – HDHP Accident – Off Job	Injury Type: Easy to Conceal Injury Medical Insurance Type: HDHP Accident Insurance Type: Off Job Gender: Female 27. Sarah fell off a ladder while cleaning her ceiling fans and	Injury Type: Hard to Conceal Injury Medical Insurance Type: HDHP Accident Insurance Type: Off Job Gender: Female 28. Sarah fell off a ladder while cleaning her ceiling fans and cannot

	sprained her ankle. She can walk but she is in a lot of pain. Her current medical plan has a deductible of $1,350 which requires Sarah to pay $1,350 out of pocket before the insurance will cover any cost of her medical care. Sarah remembers that she signed up for an Accident Insurance plan at work which will pay her cash benefits for the medical diagnosis and treatment for an injury that occurs outside of work. For example, Sarah would get up to $200 for her initial visit to the doctor or emergency room. Additionally, the accident plan will pay Sarah $1,000 if she were diagnosed with a fractured ankle. The accident plan will also pay Sarah $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Sarah and she can use the cash for any reason, including covering the cost of her medical treatment. However, Sarah knows that if she sprained her ankle at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.	walk. Sarah is in a lot of pain and thinks she fractured her leg. Her current medical plan has a deductible of $1,350 which requires Sarah to pay $1,350 out of pocket before the insurance will cover any cost of her medical care. Sarah remembers that she signed up for an Accident Insurance plan at work which will pay her cash benefits for the medical diagnosis and treatment for an injury that occurs outside of work. For example, Sarah would get up to $200 for her initial visit to the doctor or emergency room. Additionally, the accident plan will pay Sarah $1,000 if she were diagnosed with a fractured leg. The accident plan will also pay Sarah $40 per physical therapy session for up to 6 sessions. The accident benefits will be paid directly to Sarah and she can use the cash for any reason, including covering the cost of her medical treatment. However, Sarah knows that if she broke her leg at work his employer's Workers Compensation insurance would cover the cost of her medical care and she would not have any out of pocket medical costs.
<u>Medical - PPO Accident – Off Job</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: Off Job Gender: Female 29. Sarah fell off a ladder while cleaning her ceiling fans and sprained her ankle. She can walk but she is in a lot of pain.	Injury Type: Hard to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: Off Job Gender: Female 30. Sarah fell off a ladder while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she fractured her leg.

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<u>Medical – None</u> <u>Accident – On & Off Job</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: None Accident Insurance Type: On & Off Job Gender: Female 31. Sarah fell off a ladder while cleaning her ceiling fans and sprained her ankle. She can walk but she is in a lot of pain.	Injury Type: Hard to Conceal Injury Medical Insurance Type: None Accident Insurance Type: On & Off Job Gender: Female 32. Sarah fell off a ladder while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she fractured her leg.

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Medical – HDHP <u>Accident – On & Off Job</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: HDHP Accident Insurance Type: On & Off Job Gender: Female 33. Sarah fell off a ladder while cleaning her ceiling fans and sprained her ankle. She can walk but she is in a lot of pain.	Injury Type: Hard to Conceal Injury Medical Insurance Type: HDHP Accident Insurance Type: On & Off Job Gender: Female 34. Sarah fell off a ladder while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she fractured her leg.

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<u>Medical – PPO Accident – On & Off Job</u>	Injury Type: Easy to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: On &Off Job Gender: Female 35. Sarah fell off a ladder while cleaning her ceiling fans and sprained her ankle. She can walk but she is in a lot of pain.	Injury Type: Hard to Conceal Injury Medical Insurance Type: PPO Accident Insurance Type: On &Off Job Gender: Female 36. Sarah fell off a ladder while cleaning her ceiling fans and cannot walk. Sarah is in a lot of pain and thinks she fractured her leg.

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Scenario Manipulation Check Question

In the scenario you just read, how would you describe the injury the individual sustained?

Step 2: Please read and answer each question listed below based on the information in the scenario you just read.

1. How likely is it that Mark/ Sarah will file a workers compensation claim when he/she returns to work on the day following his/her injury in order to get medical treatment for his/her injury?
Not Likely
Somewhat Likely
Very Likely
2. How would you characterize the nature of the injury in this scenario?
Very easy to conceal
Easy to conceal
Somewhat easy to conceal
Somewhat hard to conceal
Hard to conceal
Very hard to conceal
2. How would you characterize the medical financial exposure presented in the scenarios?
Very low
Low
High
Very high

Step 3: The following questions should be answered based on your personal perspective, experience and attitudes. If you are not currently employed, answer any job related questions about your last employment experience.

Moral Hazard Scenario Questions Acceptance of Fraud - Adapted from Tennyson (2002)—5 items (5-point scale)

1. Inflating an insurance claim to help cover out of pocket cost, such as deductibles, is acceptable (1) Strongly disagree (2) Disagree (3) Neither agree nor disagree (4) Agree (5) Strongly agree
2. Misrepresenting the nature of an incident to obtain insurance payment for a loss not covered by the policy is acceptable (1) Strongly disagree (2) Disagree (3) Neither agree nor disagree (4) Agree (5) Strongly agree
3. Misrepresenting the facts on an insurance application in order to obtain insurance or obtain a lower rate is acceptable (1) Strongly disagree (2) Disagree (3) Neither agree nor disagree (4) Agree (5) Strongly agree

4. Submitting an insurance claim for damages that occurred prior to the accident being covered is acceptable (1) Strongly disagree (2) Disagree (3) Neither agree nor disagree (4) Agree (5) Strongly agree
5. Falsifying receipts or estimates to increase the amount of an insurance settlement is acceptable (1) Strongly disagree (2) Disagree (3) Neither agree nor disagree (4) Agree (5) Strongly agree

Job Satisfaction Adapted from Barling et al (2003)—3 items (5-point scale)

1. I am satisfied with the way I am treated at my current job (1) Strongly disagree (2) Disagree (3) Neither agree nor disagree (4) Agree (5) Strongly agree
2. My current job is a good place to work (1) Strongly disagree (2) Disagree (3) Neither agree nor disagree (4) Agree (5) Strongly agree
3. I often think about leaving my current job (1) Strongly disagree (2) Disagree (3) Neither agree nor disagree (4) Agree (5) Strongly agree

Demographic Questions

1. Gender
Male
Female
Does not Identify as Male or Female
2. Age
18-25
26-35
36-45
46-55
56-64
65 or Older
3. Race
Asian
Black
Latino
White
4. Education
Post graduate degree

Bachelor's degree
High school diploma/ GED or less
5. Income Level
Over $100,000
$75,000 - $99,999
$50,000 - $74,999
$25,000 - $49,999
Under $25,000
No Income
6. Are you currently employed?
Yes
No
Self Employed
7. If employed, does your company offer health Insurance?
Yes
No
8. Are you currently covered by health insurance?
Yes
No
9. If covered by health insurance, how do you obtain health insurance?
My or my spouse's employer plan
My parent's employer's plan
A public plan (Medicaid, Medicare, Public Exchange)
10. If employed, does your company offer accident Insurance?
Yes
No
I don't know
11. Are you enrolled in your company's accident insurance plan?
Yes
No
I don't know
12. Have you ever filed a Workers Compensation claim?
Yes
No

VITA

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