THE PATIENT'S PERSPECTIVE OF

OCCUPATIONAL LOWER BACK INJURIES

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Abstract

Workers' compensation programs have emerged as among the largest and most important social programs in the United States. Workers' compensation claims in the state of Michigan account for an expenditure of approximately 1.3 billion dollars annually (Michigan Workers' Compensation Agency, 2011. *2011 Annual Report*). Back injuries are the most prevalent work-related injury in the United States. Since 2002, such injuries in the baby-boomer generation have increased at a rate of 50% (Toossi, 2005. *Labor force projections to 2014: Retiring boomers*). The purpose of this study is to describe the personal lived experiences of older (over 55 years old) injured employees as a result of injuring their lower backs at work. The study only examined occupational lower back injuries suffered while assembling automotive parts in the state of Michigan. The study incorporates a qualitative design, specifically an interpretative phenomenological analysis, to focus on the lived experiences of the participants, and underpins the theory of planned behavior to assist with forecasting and understanding the particular behaviors within this population. A four-step data analysis method was used to illustrate and understand the meaning and essence of the lived experience of the injured, older automobile assembler worker.

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CHAPTER 1. INTRODUCTION AND STATEMENT OF THE PROBLEM

Introduction to the Problem

Throughout U.S. history, worker's compensation has emerged as one of the largest and most important social programs in the nation. Referred to as the oldest social insurance system in the United States, most states adopted some sort of worker's compensation in the 1910s (Edmiston, 2006). The Michigan Workers' Compensation Act of 1912 provides benefits for the injured worker and the employer alike. However, unlike other social systems such as Social Security and Medicare, the workers' compensation system provides the injured worker with healthcare coverage and lost income (Nicholson, 1986). In 2013, nearly all employers in Michigan, both public and private, were covered by the Act. In the state of Michigan if an employer has three or more employees at any one time, or employs one or more individuals for more than 35 hours per week for 13 or more weeks, the employer is subject to the Act.

Injuries incurred on the job are a large expense for both the injured individual and the employer (Leigh & Robbins, 2004). There are approximately 4.3 million workers in the state of Michigan (Michigan Department of Technology, Management, & Budget, 2012) and the costs of workers' compensation claims in Michigan are approximately 1.3 billion dollars annually (Michigan Workers' Compensation Agency, 2011). These costs include lost wages, lost productivity, medical expenses, retraining, and replacement workers.

Occupational medicine (OM) is a specialization of medicine devoted to the prevention and treatment of work-related illnesses and injuries (LaDou, 1997). OM

healthcare provider includes physicians, physician assistants, occupational and physical therapists, and nurses. These professionals serve as consultants to employers in identifying safety risk, helping create protocols that enhance safety and reduce risk, and helping create treatment plans. The OM provider may assist the employer by providing ergonomic suggestions for the workers' environment, changes in repetitiveness of jobs, the use of assisted devices, and maybe most importantly worksite visitations. These job-site visits are key for the OM provider to understand the details of a job better. Understanding the detailed underpinnings of a specific job requirement and environmental conditions can afford the OM providers a knowledge base not available to the non-OM provider. The OM provider may benefit the employer further by reducing work-related injuries, thus reducing cost and increasing productivity (Nicholson, 1986). Lastly, OM providers are often seen as gatekeepers within the workers' compensation system. They achieve this by working closely with insurers and employers alike. OM providers help ensure that only appropriate clinical testing and procedures are ordered for patient care (Loisel et al., 2005).

Lower back injuries are among the most common and difficult to treat of occupational injuries. While there are many variables within lower back pain (LBP), studies identify one commonality: the causation is a multifactorial event (Davidowski, Steuden, & Kurylowicz, 2010; Indahl, 2004; Quittan, 2002; Truchon & Fillion, 2000).

An aging U.S. population will add a greater depth to the workers' compensation dynamics because of the aging baby-boomer generation (born 1946-1964). The proportion of this group of older individuals in the general population is growing at a rate

that goes unmatched by any previous generation (Grandjean et al., 2006). Toossi (2005) predicted that workers over the age of 55 would increase by approximately 50% between the years 2002 and 2014. The U.S. Census Bureau (2010) reported that between 2010 and 2030 the number of individuals aged 65 and older is likely to increase dramatically by nearly 80% (U.S. Census Bureau, 2010).

However, an aging population by itself does not necessarily translate to the older workers actually retiring. Quinn (2010) explained that the mandatory retirement age was eliminated for the majority of the U.S. workforce in 1986. Murphy, Xu, and Kochanek (2012) reported that the U.S. population has a healthier median life expectancy and that this has increased for both men and women, the average ages being reported as 76.2 and 81.1, respectfully. It is, however, true that work experience decreases the number of work-related injuries. Grandjean et al. (2006) pertinently added that the aging worker carries a higher fatality and severity rating.

Numerous psychosocial experiences compound the quandary of an aging workforce and LBP. Davidowski, Steuden, and Kurylowicz (2010) identified that "different aspects of psychosocial functioning are best accounted for [by] the diverse patterns of psychological factors, which suggest involvement of different psychological mechanisms in development of LBP-related disability" (p. 613). Subsequently, Davidowski et al. assessed the significance of coping strategies, personality traits, social support systems, and the differences in the psychosocial functions among people suffering with LBP.

Healthcare is a salient focus. An occupational injury is not solely about the physical injury to the patient; there is an emotional component as well. Trustworthiness is a critical component to a provider-patient relationship (Indahl, 2004; Suchman, Markakis, Beckman, & Frankel, 1997; Thom, Hall, & Pawlson, 2004). The trustworthiness that underscores the patient-provider relationship is challenged in the occupational setting. Adding to the patient's frustration level in the state of Michigan is the fact that the employer directs the injured worker's healthcare for the first 28 days (Michigan Workers' Compensation Agency, 2011). In other words instead of being treated by a trusted personal healthcare provider, the injured worker is required to see an employer-directed healthcare provider: this provider is often referred to as the company doctor. Often no previous dialogue between the two parties has been established. Therefore, the platform is set for this study.

The significance of this qualitative study is that it explores the lived experiences of older automotive assembly workers who have injured their lower backs at work. The theoretical framework of the study is based upon Ajzen's (1991) theory of planned behavior (TpB). This study was guided by this theoretical framework and illuminates the importance of the experiences of aging workers who suffer from work-related LBP. Neuman (2006) reported "qualitative researchers create new concepts and theory by blending together empirical evidence and abstract concepts" (p. 459). This phenomenological study may prompt other occupational healthcare providers and researchers to develop and implement better treatment algorithms that are underscored by the personal lived experiences of the injured older automobile assembly worker. This

chapter introduces the reader to the conundrum of OM that encompasses lower back injuries, the aging automobile assemblage worker, and workers' compensation within the state of Michigan.

Background of the Problem

Injuries to the back are the most prevalent work-related injury in the United States (Jimmy, Jung, & Jimmy, 2008). There are approximately 4.3 million workers in the state of Michigan and an estimated 433,000 are unemployed (Michigan Department of Technology, Management, & Budget, 2012). Healthcare coverage in itself is costly. When Michigan residents are unemployed, they do not have access to cost-effective employer-sponsored healthcare programs. Though insurance is costly, federal law (Consolidated Omnibus Budget Reconciliation Act of 1985 does help to ensure individuals between jobs have the ability to continue coverage from their previous employer for an 18-month period. Further estimates reported that there are approximately 50 million Americans throughout the United States without healthcare coverage in 2012 (LaPierre, 2012).

Workers' compensation claims in the state of Michigan account for an expenditure of approximately 1.3 billion dollars annually (Michigan Workers' Compensation Agency, 2011). Furthermore, the Michigan workers' compensation agency reports that monies received from worker compensation injuries are not subject to state or federal taxes. The aging baby-boomer generation has resulted in an older workforce in the United States than in previous generations (Toossi, 2005). An older workforce produces higher per capita costs than do younger workers (Grandjean et al.,

2006). The significance of this study is further underscored by the fact that an injured worker continues to receive pay and benefits and cannot be fired or retaliated against by an employer for injuries suffered at work (Michigan Legislative Council, 2012).

Statement of the Problem

In spite of the unprecedented leaps that medicine has recently made, the origins of back pain, its clinical presentations, its treatment, and its clinical outcomes remain a mystery (Davidowski et al., 2010; Indahl, 2004; Quittan, 2002; Truchon & Fillion, 2000). LBP is the number one cause of disability due to work-related conditions (Kerr et al., 2001; Pransky, Shaw, & Fitzgerald, 2001). The cost of occupationally related LBP is alarming. It is reported that these injuries cost the United States 35 billion dollars annually (Pransky et al., 2001). Watson and Shay (2011) reported that this figure is as high as 2.9% of the U.S. gross domestic product. The overall prevalence of a lower back injury is documented at 15-30% of the entire population (Kerr et al., 2001; Pransky et al., 2001; Vandergrift et al., 2012).

Previous studies (Cote, Durand, Tousignant, & Poitras, 2009; Kerr et al., 2001) have indicated that as healthcare expenditures continue to spiral out of control, the ability to navigate a different azimuth may help shed light on this portion of the healthcare market, thus reducing the resources required for treatment, which in turn would be profitable for the employer. Indahl (2004) pertinently reported that providers often use a methodology to arrive at an educated hypothesis—a diagnosis. In other words, a provider will go through a stepped process of gathering data about the patient by taking a thorough history, performing a physical examination, and even ordering imaging studies

such as X-rays, CTs, and MRIs. In the end the data will help support a diagnosis, but really what else do these data tell providers? First these data will help form and implement a treatment plan. Second, they help establish a report of trustworthiness between the provider and the patient (Indahl, 2004). But what this process does not provide is knowledge of what the injured worker personally experiences by being hurt at the worksite and treated at an OM clinic.

The patient-provider trustworthiness scenario is challenged in the OM setting as the employer directs care during the first 28 days of treatment (Michigan Workers' Compensation Agency, 2011). As noted, the employer directs the injured employee to a designated occupational clinic; however, this does not imply that the injured party will see the same provider each visit, which further undermines trustworthiness.

Previous studies have indicated that a direct relationship exists between lower back injuries and automobile assemblage work (Engstrom, Hanse, & Kadefors, 1999; Ghaffari, Alipour, Jensen, Farshead, & Vingard, 2006; Hussain, 2004; Iritani, Koide, & Sugimoto, 1997; Jimmy et al., 2008; Kerr et al., 2001). As the economic turmoil of the U.S. automobile industries continues, the futures for the unemployed and underemployed automobile assemblage workers within the state of Michigan remain uncertain. Of additional interest to this study are estimates reporting that there are 1.1 million uninsured residents residing in the state of Michigan (Greene, 2010). Underscoring the significance of this, the injured worker collects monies from these workers' compensation claims; more importantly, this money is untaxed. For the duration of the claim, these untaxed dollars, can rapidly approximate the injured worker's total pre-injury taxed income. This

phenomenological study may prompt healthcare providers, employers, and insurers to develop and implement incentives to help get the injured worker back into the workforce.

As mentioned, current literature identifies the magnitude of work-related lower back injuries, identifies that direct associations between automobile assembly work and LBP already exist, and identifies that there is a prevalence of expenses incurred by the aging U.S. workforce. However, any intertwinings of the aforementioned entities are concealed by a scarcity of knowledge (Stikeleather, 2004).

Purpose of the Study

The purpose of this phenomenological study is to discover the meaning and essence of aging automobile assembly workers and their lived experiences of occupational-related lower back injuries. The study used interpretative phenomenological analysis (IPA) to describe the personal lived experiences of older (over age 55) injured employees because of injuring their lower backs at the work-site while assembling automotive parts in Michigan. The intent of the study was to explore the lived experiences, perceptions, attitudes, and coping strategies of the aging automotive assembly worker. This phenomenological study may prompt other occupational healthcare providers and researchers to develop and implement better treatment algorithms that are underscored by the personal lived experiences of injured older automobile assembly workers.

Many risk factors are associated with LBP, including social class, occupation, employment status, and physical fitness. Furthermore, previous researchers (Grahn, Ekdahl, & Borquist, 2000; Kerr et al., 2001; Malmgren-Olsson & Armelius, 2003;

Quittan, 2002) indicated that race, gender, educational level, self-motivation, efficacy, and age have a great influence on clinical outcomes. However, there remains a lack of research regarding just how a patient feels after injuring his or her lower back at work (Stikeleather, 2004). Neuman (2006) reported, "instead of testing a hypothesis, a qualitative analyst [researcher] may illustrate or color in evidence showing that a theory [TpB], generalization, or interpretation is plausible" (p. 459). Glicken (2003) stated that qualitative research has the ability to demonstrate trends and associations that may be overlooked by other empirical methodologies. Qualitative research is further supported with detail richness and context sensitivity and it is "capable of showing the complex processes or sequences of social life" (Neuman 2006, p. 459).

The aim of this study is multidimensional: to discover (a) if there are financial and/or other benefits that may inhibit injured workers from actually getting better, (b) how older injured automobile assembly workers feel about being directed for treatment by a company provider instead of their personal providers, and (c) if older automobile assembly workers nearing retirement have unique challenges to overcome in order to return to the job site.

Central Research Question

The purpose of the research question was to explore the phenomenon under study. Creswell (2003) explained that qualitative research questions are open-ended and also restate the purpose of the study. The integral focus of the study is to understand and describe the event from the view of the aging injured worker (Mertens, 2005). LBP is a multifaceted problem. Previous research (Davidowski et al., 2010; Grahn et al., 2000;

Kerr et al., 2001; Malmgren-Olsson & Armelius, 2003; Quittan, 2002) indicates that social class, occupation, employment status, physical fitness, race, gender, educational level, self-motivation, efficacy, and age have great influence on the clinical outcomes within the healthcare setting. Thus, the central research question posed for the phenomenological study is what types of attitudes, behaviors, and self-motivators older automobile assemblage workers exhibit after injuring their lower backs at the worksite?

Corollary Research Questions

- How does an older individual feel after being hurt at his or her worksite?
- How does an older individual feel about returning to his or her worksite after being injured there?
- What motivates an older, injured worker to return to the workplace?

Rationale, Relevance, and Significance of the Study

This study is needed because a dearth of knowledge exists here (Stikeleather, 2004). As indicated earlier in this study, LBP is a significant, multifactorial healthcare expenditure. Many risk factors are associated with LBP, including social class, occupation, employment status, and physical fitness.

Like LBP itself, the related costs of LBP treatment are also multifaceted. These costs can be characterized as either direct or indirect. Direct costs include those of the clinic, the clinician, rehabilitative services, durable goods, and administrative services; whereas indirect costs include loss of production at the worksite and replacement and retraining costs (Leigh & Robbins, 2004). A better understanding of the multiple factors involved in LBP may lead to reducing the overall timeline of care, thus minimizing both

the direct and indirect costs. If an OM provider is better informed, he or she may be able to make better-informed decisions about care based on the data of such studies. Past research (Keel et al., 1998; Kerr et al., 2001) indicates that the pathology of the spine is not always noted as the catalyst of LBP. Psychosocial barriers are often implicated: this is supported in part because no single treatment method seems to be better than a placebo (Keel et al., 1998).

Evidence-based medicine (EBM) is defined as utilizing current evidence, usually from quantitative research data, in regards to the clinical effectiveness of medical interventions (Gupta, 2003). A knowledge deficit exist in regards to current treatment plans of lower back injuries, treatment of older workers, and how patients feel about their lived experiences as LBP suffers (Stikeleather, 2004). This knowledge deficit may prevent a bridge from forming between the clinician and the patient. In order to counter such a knowledge deficit, this qualitative research study examined the lived experiences of older individuals with work-related lower back injuries. Previous data suggest that trust is fundamental to the patient-provider relationship (Indahl, 2004; Thom et al., 2004).

Additional research within this study may allow for the exploration of the lived experiences of the aging injured workers and the providers involved in their care, both of which are critical to this ubiquitous, expense-ridden health condition. This research contributes knowledge important for improving the patient-clinician relationship and may develop understandings that may lead to a parsimonious approach for future management of occupational lower back injuries (Guo, Tanaka, Halperin, & Cameron, 1999; Shaw & Huang, 2005). A new avenue of approach could benefit the injured worker, the

occupational provider, the employer, and the insurer. A further goal of this study is to identify themes that may encourage the aging injured worker to return to the workforce.

Definition of Terms

Evidence-based medicine (EBM). EBM is defined as utilizing current evidence in the form of quantitative research data to evaluate the clinical effectiveness of medical interventions. The principal objective of EBM is to advance health outcomes through the utilization of the most effective intercession (Gupta, 2003).

Healthcare provider. One who provides healthcare to others. This includes, but is not limited to, physicians, physician assistants, and nurse practitioners (Byers, Mays, & Mark, 1999).

Interpretative phenomenological analysis (IPA). A qualitative construct that allows detailed exploration of the participants' personal lived experiences and how they qualify or make sense of their experiences (Smith, 2004).

Occupational lower back pain (LBP). Pain of the lower back from work is one of the major complaints in OM clinics and may originate from the spine, muscles, nerves, or other surrounding structures. LBP may present in the hips, legs, groin, testicles, or ovaries (Zenz, Dickerson, & Horvath, 1994).

Occupational medicine (OM). The branch of medicine dealing specifically with the prevention and treatment of illnesses or injuries directly related to an individual's work (LaDou, 1997).

Theory of planned behavior (TpB). This is a philosophical theory that assists with forecasting and understanding particular behaviors in specific frameworks. Attitudes

toward the behavior, subjective norms with respect to the behavior, and perceived control over the behavior can predict behavioral intent with some degree of precision. In turn, these intentions, in combination with perceived behavioral control, can account for a considerable proportion of variance in individual behavior (Ajzen, 1991).

Workers' compensation insurance. A form of social insurance under the Workers' Compensation Act that reimburses an employer for damages that must be paid to an employee for injury or illness occurring in the course of employment (LaDou, 1997).

Assumptions and Limitations

Numerous assumptions are made in the course of this study. First, it is assumed that the participants in this study are willing to participate in this study. Secondly, it is assumed that the participants will give truthful responses in regards to their experience with work-related injuries. And last, it is assumed that the interviews will accurately assess the lived experiences of the injured assembly workers' experience.

Because the target population of the study is limited to assembly workers within a large metropolitan area in the state of Michigan, emerging themes may not be applicable outside of this geographical area or work type. Further, this study used the interpretive phenomenological approach, which addresses lived experiences, but it did not address any cause-effect relationships.

Chapter 1 Summary

In review, this chapter has introduced the reader to the multifaceted quandary that LBP may present in the OM setting and with our aging workforce. In addition, the purpose of this study was posited, the central and corollary research questions were identified, and the assumptions and limitations of the study were identified. In Chapter 2, the reader is introduced to the review of literature and the conceptual framework underpinning this study.

CHAPTER 2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The purpose of this study is to describe the personal lived experiences that older (over age 55) employees experience because of injuring their lower backs at the worksite while assembling automotive parts in Michigan. Moustakas (1994) reported phenomenological studies as those in which "the investigator abstains from making suppositions, focuses on a specific topic freshly and naively, constructs a question or problem to guide the study, and derives findings that will provide the basis for further research and reflection" (p. 47).

Previous researchers (Guo et al., 1999; Jimmy et al., 2008, Vandergrift, Gold, Hanlon, & Punnett, 2012) suggested that injuries to the back are the most prevalent work-related injury in the United States. Government estimates report that there are 4.3 million workers in the state of Michigan (Michigan Department of Technology, Management, & Budget, 2012). Further, the cost of workers' compensation claims in Michigan accounts for approximately 1.3 billion dollars annually (Michigan Workers' Compensation Agency, 2011). According to the Michigan Department of Technology, Management, and Budget (2012) report, the unemployment rate in the state of Michigan is currently 8.5%. Of additional interest to this study is the fact that there are an estimated 1.1 million uninsured residents in the state of Michigan (Greene, 2010).

Introduction to the Literature Review

In this chapter, the reader is introduced to a brief overview history of workers' compensation, the Workers' Compensation Act, which guides the state of Michigan, the cost of LBP, risk factors, and the prevalence of LBP. Empirical research studies are

examined and the importance of EBM is addressed. Lastly, the researcher introduces the theoretical construct that guided this study.

According to Ajzen (1991), an optimal prediction of behavior can be obtained from an individual's intent, which in itself is a good indicator of how hard an individual is willing to try and how much effort he or she is willing to exert. The TpB is a framework that allows researchers to examine beliefs and attitudes.

The researcher posits that further studies that explore the lived experiences of LBP patients are needed. Furthermore, it is believed this research may add to the paradigm of EBM and lead to a better understanding of the lived experiences of LBP-sufferers from assemblage work; this in itself may enhance the overall patient-clinician relationship.

An exhaustive literature search was conducted through the Capella University Library utilizing the databases Academic Search Premier, CINAHL with Full Text, EBSCO Host, ProQuest Medical Library, and PsycARTICLES. The search included key words such as occupational low back pain, occupational medicine, aging workforce, interpretative phenomenological analysis, theory of planned behavior, rehabilitation, automobile assemblage, and workers' compensation.

Historical Perspective

The Industrial Revolution refers to a period in which there was a significant shift from handcrafted or home-produced products to machine- and/or factory-produced products. As America marched toward industrialization in the middle of the 19th century, populations gravitated towards the cities to support the factories that dotted the

surrounding landscape. These factories were capable of producing not only goods and services, but also injuries to the workforce. As the number of factories vastly increased, so did the number and the severity of the injuries. Even though the propensity for injury was well known, the factories thrived and injuries escalated as America joined the Industrial Revolution (Wolf, 2000). The Industrial Revolution truly changed American society and its economy into the modern urban-industrial state that now exists.

However, unfortunate individuals injured on the job bore the responsibility for and the consequences of their injuries. Injured workers often sought legal judgments through the court system, but they had to produce proof that the employer was negligent, while at the same time proving that they were not negligent for the injuries sustained. This process was laborious and sufficient proof was difficult to establish. Nevertheless, once established, the size of the judgment awards could be enormous. These colossal awards made by sympathetic juries could easily result in the ruination of an individual business, possibly impeding the industrialization of our country (Wolf, 2000).

This impetus spearheaded legislation to change litigation, which provided benefits to the injured worker and the employer (Edmiston, 2006). Referred to as the oldest social insurance system in the United States, most states adopted some sort of Workers' Compensation Act in the 1910s (Edmiston, 2006), including Michigan in 1912. By the 1950s, all states had a workers' compensation law in effect. Additionally, other federal workers' laws were enacted to help fill gaps of coverage in the states Workers' Compensation Acts (i.e., the Longshoremen's and Harbor Workers' Compensation Act of

1988 and the Federal Coal Mine Health and Safety Act of 1988) (Yorker, 1994), although these are outside the scope of this study.

Workers' Compensation Act

In 1912, Michigan adopted the Workers' Compensation Act, which is referred to as the Workers' Disability Compensation Act. In 2012, nearly all employers in Michigan were covered by the Act: currently, there are approximately 4.3 million workers within the state (Michigan Department of Technology, Management, & Budget, 2012). The Workers' Compensation Act was constructed to ensure that a worker who sustained an injury or illness in the course of his or her work was covered for healthcare expenditures and lost wages. Each state has its own version of this law and the state statutes provide specifics on how each law is administered. This study was conducted within the state of Michigan; thus, details of the Michigan's workers compensation laws guided the study.

The cost of healthcare in the United States is exorbitant and leaves nearly 50 million residents without healthcare coverage (U.S. Department of Health & Human Services, 2012). Healthcare expenses leave many families impoverished each year. However for injuries sustained during work duties, workers' compensation insurance provides for payment of medical expenses as well as lost wages and ensures that such expenses will not bankrupt the employer either.

Back injuries are the most prevalent work-related injury in the United States (Engstrom et al., 1999; Ghaffari et al., 2006; Hussain, 2004; Iritani et al., 1997; Jimmy et al., 2008; Kerr et al., 2001; Nguyen & Randolph, 2007) and they account for one of every five-workplace injuries. Vandergrift, Gold, Hanlon, and Punnett (2012) reported,

"Evidence from both experimental and epidemiological studies suggests that psychosocial and physical exposures may interact synergistically to cause musculoskeletal disorders" (p. 29). The primary aim of Vandergrift et al.'s study was to examine associations amidst physical and psychosocial risks factors of LBP amongst automobile assembly workers. The study concluded that the incidence of LBP was associated with workers with lower levels of job control and physically demanding jobs. In other words, it was found that there was a correlation between psychological demands and physical exposures.

There are over one million lower back injuries reported annually, costing billions of dollars in compensation claims (Kerr et al., 2001; Michigan Workers' Compensation Agency, 2011). From a financial standpoint alone, the significance easily is calculated: a 1% reduction in overall back injuries in the United States would save billions of dollars (Guo et al., 1999).

Benefits of the Workers' Compensation Act

The major benefit emerging from this Act for the employer was that, under most circumstances, the employee was no longer able to sue the employer for injuries that arose from the workplace (Wolf, 2000). Even though this is a no-fault system, employers and workers can still sue each other over issues such as which doctor's advice is better (Schine & Yang, 1992). As a result employers no longer had the fear of paying jury awards for pain and suffering damages and the employee no longer had to prove or disprove negligence. Under a no-fault system the only proof that needed to be established was whether there was a work-related injury and whether the injury occurred

during the course and/or scope of employment. Additionally, Wolf (2000) reported that injured workers had their medical bills paid for by their employer and the injured worker was entitled to a percentage of his or her pre-injured wages. Thus, employers exchanged the uncertainty of litigation for the price of insurance premiums (Durbin, 1993), which in turn was initially passed to the employee in the form of lower wages (Edmiston, 2006).

In 1914 the Office of Industrial Hygiene and Sanitation (now known as National Institute for Occupational Safety and Health), the watchdog agency for worker compensation issues, was formed. It is interesting to note that this type of medicine (occupational) was not formally recognized until 1918, when Dr. Alice Hamilton was appointed to the Harvard Medical School Board of Industrial Medicine (American College of Occupational and Environmental Medicine [ACOEM], 2007). OM is devoted to the specialization of medicine dealing with prevention and treatment of work-related illnesses and injuries. This branch of medicine employs over 5000 physicians (ACOEM, 2007).

In 2012 nearly all employers in Michigan were covered by the Act, which included both public and private employers. If an employer has three or more employees at any one time or employs one or more individuals for more than 35 hours per week for 13 or more weeks, the employer is subject to the Act. There are approximately 4.3 million workers in the state (Michigan Department of Technology, Management, & Budget, 2012). In July 2011, the Michigan Department of Technology, Management, and Budget reported the state unemployment rate at 10.9%, which is nearly two percentage points above the national average. It is reported that the cost of work-related

injuries in the state of Michigan costs 1.3 billion dollars annually (Michigan Workers' Compensation Agency, 2011). Greene (2010) estimated that there are 1.1 million uninsured residents within the state of Michigan.

The Cost

Despite the unprecedented leaps and bounds medicine has recently made in regards to organ transplants, tumor resections, stem cell research, and the like, the origins of back pain and its syndrome, treatment, and clinical outcomes remain a mystery (Chou et al., 2007). Injuries of the lower back have plagued humankind for centuries (Indahl, 2004). The prevalence of a lower back injury is noted at between 15 and 30% of the total U.S. population (Kerr et al., 2001; Pransky et al., 2001; Vandergrift et al., 2012).

The reported cost of occupational-related back pain ranges from about 11 to 35 billion dollars annually (Chou et al., 2007; Michigan Workers' Compensation Agency, 2011; Pransky et al., 2001). Further, approximately 5% of the individuals with reported lower back disability account for approximately 75% of the cost (Chou et al., 2007). Nonetheless, it is noted that back injuries are often self-limiting and resolve without any treatment (Chou et al., 2007).

The cost of LBP can be characterized either directly or indirectly. Direct cost represents the cost for the clinic, the clinician, rehabilitative services, durable goods, and administrative expenses. The indirect costs include loss of production at the worksite and the costs of replacements and training (Chou et al., 2007; Leigh & Robbins, 2004; Williams & Myers, 1998). A coexisting equilibrium of these costs may seem insurmountable, yet such a strategy should be explored (Guo et al., 1999). Surrounding

all the data, one commonality can be inferred; the causation of LBP is a multifactorial dilemma (Chou et al., 2007; Indahl, 2004; Nguyen & Randolph, 2007; Quittan, 2002; Vandergrift et al., 2012).

Common Factors

Risk factors associated with LBP include social class, occupations, employment status, and physical fitness. Other important demographics from previous studies include race, gender, and age (Quittan, 2002). Grandjean et al. (2006) reported, "older workers experience a relatively low overall frequency of work-related injuries, but have proportionately higher rates of workplace fatality and higher injury severity" (p. 103). Toossi (2005) predicted that the proportion of workers over the age of 55 years would increase approximately 50% between the years of 2002 and 2012.

The plethoric etiologies of musculoskeletal disorders include individualized characteristics, environmental factors, and compensation received. Coutu, Baril, Durand, Cote, and Rouleau (2007) reported that associated factors include the "worker, work environment, compensation policies, healthcare system and insurance system" (p. 522). In addition, these researchers indicated that injured workers utilize a coping mechanism for their injury through representation, which in turns helps the workers interpret their personal injuries. These representations are underlined by the injured workers' thoughts, beliefs and attitudes (Coutu, Baril, Durand, Cote, & Rouleau, 2007). To complicate the process even further, the employer and the insurer are often involved in the disability process as well (Chou et al., 2007; Loisel et al., 2005).

Plausible factors other than individual worker characteristics include environmental factors in the workplace, the healthcare system, compensation, and the integral relationships that exist between the patient, the provider, the employer, and the insurers (Loisel et al., 2005). Additional studies (Acheson, 1998; Bongers, de Winters, Kompier, & Hildebrandt, 1993; Burdorf & Sorock, 1997) reported that there is evidence of existing connections between work-related psychosocial factors, lack of control, poor skill use, and lack of social support. Chou et al. (2007) reported that psychosocial and emotional distresses are better predictors of LBP outcomes than duration, severity of pain, or even the findings during physical examination.

Resnik and Dobrykowski (2005) suggested that their findings imply that clinical outcomes are better when the healthcare provider involves the patient in his or her own treatment plan, thus improving decision-making and quality improvements for the patient. Other additional common treatment strategies include medications such as analgesics, muscle relaxants, and non-steroidal anti-inflammatory drugs, as well as physical therapy interventions (Chou et al., 2007; Quittan, 2002). Treatments for occupational related LBP consist of multiple approaches, including physical rehabilitation, diagnostic testing, and patient education. However, no one clear approach utilized is better than any other (Chou et al., 2007; Shaw & Huang, 2005).

Prevalence

LBP is commonplace in industrialized nations, affecting 50% of all workers at some point during their life (Azoulay, Ehrmann-Feldman, Truchon, & Rossignol, 2005; Kerr et al., 2001). Chou et al. (2007) reported LBP as the fifth leading cause of physician

visits in the United States. Additionally, a quarter of adults in the United States report having at least one day of LBP within the preceding three months (Chou et al., 2007). Chou et al. reported that patients and clinicians alike could easily become frustrated in the treatment of this costly condition. Further, the authors noted "little is known about the effects of the patient-clinician relationship in LBP" (p. 818).

As noted above, past research clearly indicates that pathology of the spine is not always found as the catalyst of LBP. In other words, the mechanics of and treatment plans for LBP are not clearly defined. Psychosocial barriers are often implicated and no single treatment method seems to be better than a placebo (Chou et al., 2007; Keel et al., 1998; Kerr et al., 2001).

EBM is defined as utilizing current evidence in the form of quantitative research data in regards to clinical effectiveness of medical interventions (Gupta, 2003). This type of evidence-based practice helps coordinate uniformity by reducing inept practice. Cote, Durand, Tousignant, and Poitras (2009) reported that clinical practice guidelines are useful tools clinicians may utilize to navigate treatment options based on EBM.

In the last decade, the use of EBM has increased. Furthermore, it uses quantitative research data in regards to the effectiveness of medical interventions (Gupta, 2003). EBM is defined as utilizing current evidence, usually from quantitative research data, in regards to the clinical effectiveness of medical interventions (Gupta, 2003). A knowledge deficit exists in regards to current treatment plans of lower back injuries and older workers and in regards to how patients feel about their lived experiences as LBP sufferers (Stikeleather, 2004). This knowledge deficit may prevent a bridge from

forming between the clinician and the patient. In order to counter such a knowledge deficit, this qualitative research study examined the lived experiences of older individuals with work-related lower back injuries.

This qualitative study explored the lived experiences of older automotive assembly workers who have injured their lower backs at work. The theoretical framework of the study is based upon Ajzen's (1991) TpB. The research was guided by this theoretical framework and illuminates the importance of the experiences of the aging worker who suffers from work-related LBP. Neuman (2006) reported that "qualitative researchers create new concepts and theory by blending together empirical evidence and abstract concepts" (p. 459). This phenomenological study may prompt other occupational healthcare providers and researchers to develop and implement better treatment algorithms that are underscored by the personal lived experiences of injured older automobile assembly workers.

The researcher postulates that the study may help to bridge the gap of knowledge that appears to exist between the OM clinician, the patient and his or her lived experiences, and the enigma that surrounds work-related lower back injuries. This researcher posits the following: In order to enhance EBM further, qualitative studies such as this one are needed to enhance clinical practice guidelines and patient-clinician interactions. Specifically, the study explores the lived experiences of older injured assembly workers. As the etiology of LBP is often askew, a better understanding of the patient-clinician relationship is warranted (Azoulay et al., 2005).

Nevertheless, data not fully utilized by practicing clinicians, whether qualitative or quantitative, bear witness to the surreal cost of treating LBP as costs continue to escalate uncontrollably (Guo et al., 1999).

Theoretical Framework

Human behavior can be explained through trait and attitude constructs (Ajzen, 1988). These attitudes and traits are "latent hypothetical characteristics that can only be inferred from external observable cues" (Ajzen, 1988, p. 2). TpB extends the theory of reasoned action. The later posits that behavioral intentions are a function of salient data that performance of a particular behavior that will lead to a specific outcome, whereas the former adds the condition of volitional control, which postulates that the greater the resources and opportunities an individual believes he or she possesses, the greater the ability to control his or her behavior.

According to Ajzen (1991), an optimal prediction of behavior can be obtained from an individual's intent, which in itself is a good indicator of how hard an individual is willing to try, and how much effort he or she is willing to exert. Ajzen's TpB is a framework that allows researchers to examine beliefs and attitudes. It is appropriate for the study because it postulates three basic constructs: attitudes toward behavior, subjective norms, and perceived control (Conn, Tripp-Reimer, & Maas, 2003).

In one example, Strating, van Schuur, and Suurmeijer (2006) used the TpB in individuals suffering from rheumatoid arthritis. The study concluded that a better understanding of the TpB could lead clinicians "to better understand the key elements or the barriers associated with initiating or maintaining self-management behavior and to

identify effective targets of intervention … and can contribute to a better biopsychosocial functioning of the patient" (p. 59). As part of the analysis and interpretation of the collected data for this research project, the data were examined and the findings explained with integrated themes produced through the theoretical expectations of the TpB.

Crucial Theoretical/Conceptual Debates

TpB assists with forecasting and understanding particular behaviors in specific frameworks. Attitudes toward the behavior, subjective norms with respect to the behavior, and perceived control over the behavior can predict behavioral intent with some degree of precision. In turn, these intentions, combined with perceived behavioral control, can account for a considerable proportion of variance in behavior (Ajzen, 1991).

As TpB continues to be utilized, it is discussed in several studies (Bagozzi & Kimmel, 1995; Conner & Armitage, 1998; Godin, Valois, & Lepage, 1993; Norman & Smith, 1995; Trafimow, Sheeran, Finlay, & Norman 2002). These authors defend their position regarding the controversy based on the omission from the theory of the idea that past behavior variables may predict future behavior.

Bridging the Gaps

Past studies have incorporated and successfully demonstrated the TpB within the confines of perceived autonomy, self-management behavior, and the influences that physical activity has on pain (Conner & Abraham, 2001; Hunt & Gross, 2009; Oreg & Katz-Gerro, 2006; Trafimow et al., 2002).

Chatzisarantis, Hagger, and Smith (2006) conducted three separate studies underpinning the idea that clinicians need to promote physical activity, which of course is essential to health maintenance. Nonetheless, the clinician needs to promote the individual's own perspectives, practices, and understandings of physical activity, not the clinician's personal view. Thus the possibility of a quagmire surfacing is present. Autonomy is often lost within the boundaries of OM and work-related injuries. This is especially noted in Michigan, where the employer directs the injured employee for healthcare during the first 28 days of treatment (Michigan Workers' Compensation Agency, 2011).

Ajzen (1991) concluded that perceived behavioral control is conceptually similar to that of self-efficacy. The theoretical basis for this study is Ajzen's (1991) TpB.

Review of the Critical Literature

The significance of the study is underpinned further as the baby-boomer generation ages. Toossi (2005) predicted that the proportion of workers over the age of 55 would increase approximately 50% between the years 2002 and 2014. As of 2012 this prediction has held true, as the proportion of baby-boomers in the population has exploded. The U.S. Census Bureau (2010) reported that between 2010 and 2030 the number of individuals aged 65 and older is likely to increase dramatically by nearly 80% (U.S. Census Bureau, 2010). Furthermore, a plethora of age-related etiologies such as musculoskeletal disorders and autoimmune diseases such as rheumatoid arthritis bring both physical and psychosocial factors to this age group (Strating, van Schuur, & Suurmeijer, 2006).

Strating et al.'s (2006) study demonstrated support for TpB through predicting and explaining self-management via determinants of attitude, social support, self-efficacy, and intention. In the end, and based on the theoretical expectations of this theory, these researchers were able to conceptualize and examine the influence of autonomy and physical activity.

Gretebeck et al. (2007) conducted a survey study using 2,056 participants who ranged in age from 65-95, with a mean of 75. The study examined the ability of TpB to evaluate the connection between the functional ability of older adults and their intention and self-reported physical activity. However, though past retirement age, 44% of the participants reported that they currently worked. Additionally, Blanchard et al. (2008) utilized TpB in their study examining 534 college students. The authors' results demonstrated the clinician's need to be aware of ethnicity when developing a plan for physical activity.

The etiology, cost, and treatment of LBP continue to confound both clinicians and researchers. Additionally, fear of activity enters the patient's equation, which leads toward inactivity on his or her part (Linton, Buer, Vlaeyen, & Hellsing, 2000; Stikeleather, 2004). More importantly, the generation of a fear factor may incite a patient's behavior and make it self-governed (Stikeleather, 2004). Further, Linton, Buer, Vlaeyen, and Hellsing (2000) aptly cited, "Succinctly put, fear generated by pain is said to result in the patient avoiding certain movements or activity" (p. 1052). In other words, patients are often fearful of the unknown (Shearer & Gordon, 2006). The patients often

question themselves: how is this activity going to make me feel? This is particularly common in the elderly workforce (Stikeleather, 2004).

Review Summary

In and of itself, OM confronts a wide range of innate challenges, as noted specifically, the intricate relationships between the patients, employers, and clinicians. In particular, management of LBP represents a large share of the practice of OM (Daniels, Huang, Feuerstein, & Lopez, 2005; Williams & Myers, 1998). Etiologies of LBP are multifaceted events, as are the constructs of costs within this paradigm (Power, Frank, Hertzman, Schierhout, & Li, 2001).

Evaluation of Viable Research Designs

The Qualitative Approach

A qualitative research design assimilates data through written records, spoken words, observed behaviors, and descriptive experiences (Berg, 2007; Creswell, 2003; Moustakas, 1994). Qualitative inquiry will center on paradigms and theoretical impressions from data. Finally, themes are developed from the collected data. Neuman (2006) reported that "instead of testing a hypothesis, a qualitative analyst [researcher] may illustrate or color in evidence showing that a theory [TpB], generalization, or interpretation is plausible" (p. 459). Glicken (2003) outlined qualitative research as having the ability to demonstrate trends and associations that may be overlooked by other empirical methodologies. Qualitative research is further supported with detail richness

and context sensitivity and is "capable of showing the complex processes or sequences of social life" (Neuman 2006, p. 459).

The IPA Construct

The research design chosen for this qualitative research study is IPA. Interpretative phenomenological analyses are based upon (a) representation of an epistemological position, (b) a set of research guidelines, and (c) a description of the empirical research body (Smith, 2004). According to Smith (2004), "other qualitative approaches have different, but overlapping epistemological, underpinnings and theoretical and methodological emphases" (p. 40).

Another type of qualitative design that was momentarily entertained for the study was an ethnographic design. This design would have allowed for a holistic picture of the everyday experiences that individuals experience as a result of their work-related lower back injuries. However, the ethnographic design was dismissed due to the time constraints that such studies demand (Creswell, 2003).

Chapter 2 Summary

In conclusion, this chapter has outlined the significance of work related LBP as a nearly ubiquitous and exceedingly costly condition not only for injured workers, but also for the employer and for society as a whole. Given the aforementioned data, a better understanding of the lived experiences of injured workers with LBP could add to the available literature. The researcher expected that themes would present through the study as attitudes, personalities, and behaviors of the older, injured automobile assemblage worker were gathered.

The principal objective of EBM is to advance health outcomes through the interpretation and implementation of the most effective intercession programs (Gupta, 2003). Frustrations by the patient and clinician within the OM setting can be traced back to the lack of clarity and loss of self-control. Ferguson, Marras, and Burr (2005) reported the recurrence rate of LBP at as high as 70% for the workforce, which in itself equates to clinicians having a poor understanding of LBP recovery. The final product that is sought by the occupational healthcare entourage is not only to do no harm to the patient, but also to return the patient to the worksite in a safe and timely manner.

Accordingly, there is a significance to identify related character factors that may aid in influencing a return to work. This study is designed to help meet those needs. This study is underpinned by TpB and the study may help to bridge an existing gap in the knowledge. In other words, exploring the lived experiences of assemblage workers with LBP may help lead to a more parsimonious paradigm for all involved entities Chapter 3 introduces the reader to the methodology utilized in the study.

CHAPTER 3. METHODOLOGY

Introduction

The purpose of this chapter is to focus on the methods used within this research study. This research study was designed to describe the personal lived experiences that injured employees experience as a result of injuring their lower backs at a worksite while assembling automotive parts in the state of Michigan. The research was qualitative, incorporating IPA to focus on the lived experiences of the participants.

Researcher's Philosophy

Modern phenomenological studies originated from the German philosophy of Edmund Husserl (1859-1938), who is regarded as the principal founder of phenomenology. The study of interpretative understandings is referred to as hermeneutics (Mertens, 2005), an approach also adopted by the constructionist paradigm (Ponterotto, 2005). Phenomenological studies have the ability to examine structures of various types of experiences ranging from perceptions, the ability to make conscious decisions, memory, imagination, emotions, desires, and the ability to personify bodily actions (Dermot, 2000). The researcher's personal philosophical thoughts are aligned with the aforementioned construct.

Ontologically speaking, it is assumed that it is important to obtain the lived experiences of those who injure their lower backs at work. It is important to capture their lived social realities and the way they experience them. These assumptions are likely a result of the researcher's personal experience as a physician assistant who has specialized in OM for the past 15 years.

Based on the researcher's personal experiences, it is assumed epistemologically that it is not entirely possible to measure the experiences of those who are injured fully using a quantitative methodology. Finally, axiologically speaking, it is assumed that the hermeneutical researcher will not focus solely on the phenomenon in its natural setting, but also on its complexity (Leedy & Ormrod, 2005). Hermeneutical researchers cannot remove their values and lived experiences from the research (Ponterotto, 2005).

Methodologically speaking as a hermeneutical researcher and using an interactive approach, the purpose of the study was to obtain multiple perspectives that might produce a better interpretation for the meaning of the injured workers' lived experiences. The meanings were then compared, contrasted, and examined for linkage. As the interview questions evolved through the study, they were adjusted accordingly to operate within the diverse domains (Mertens, 2005).

Research Method and Design

Design Model: The Giorgian Model

The intent of the Giorgian method of analysis is to uncover the meaning of a phenomenon as experienced by a human through the identification of essential themes. Giorgi (1985) presented a four-step method for analyzing phenomenological data: (a) read the complete description of the participant's experience in order to capture the sense of the experience; (b) re-read the experience again, this time looking for common threads or meaning units for the phenomena being researched; (c) once identified, use the meaning units to identify the psychological insight present; and (d) then synthesize the data collected and describe the results as a structure. The structure then guides the

analyses and justifies the decisions made during the data-analyzing phase. The intent of this IPA is to understand the situational experiences and meaning as seen through the eyes of the participants (Giorgi, 2002).

The intent of the study was to reveal any of multiple perspectives that might be available as seen through the eyes of the injured worker. The model that guided the study was the Giorgian method of phenomenological analysis (Giorgi, 1985).

Research Design Strategy

The study used a qualitative design and more specifically the phenomenological approach. Open-ended questions were used to allow the researcher to explore the patients' experiences fully; semi-structured follow-up questions were also used to clarify and explore the patients' responses. The central research question was what types of attitudes, behaviors, and self-motivators are exhibited by older automobile assemblage workers after injuring their lower backs at the worksite? The posited corollary research questions for the construct were (a) how does an older individual feel after being hurt at his or her worksite, (b) how does an older individual feel about returning to his or her worksite after being injured there, and (c) what motivates an older, injured worker to return to the workplace? Interviews were tape-recorded with participants' knowledge and then transcribed verbatim by the researcher to ensure accuracy.

Population and Sampling Procedure

The study gathered data from the participants' perspectives, including their thoughts, feelings, and personal experiences, in relation to their recent work-related

injuries. Participants were elicited for the study at their worksite areas. A passive recruitment flyer was posted. Though the focus was on the emerging themes, to give a better representation for the assemblage worker, the researcher sought an equal number of male and female participants. Participants were sought until saturation of data was obtained (Guest, Bunce, & Johnson, 2006). All of the participants shared a job description of assemblage work within the automotive industry. Nonetheless, it was duly noted that in phenomenological research and life itself, the essences of a lived experience are never totally exhausted (Moustakas, 1994).

A purposive sampling of the participants was conducted. Leedy and Ormrod (2005) recommended that 5-25 individuals are needed for this type of sampling. Individuals were solicited until these numbers were met.

The setting was an urban business area within the state of Michigan. Data were gathered through face-to-face interviews. A purposive sampling technique was utilized, the rationale being that there would be some differences present though the utilization of this type of sampling (Neuman, 2006). Categorical representation was used to describe the views of those participants meeting the criteria for the study. This type of qualitative methodology allowed the study to provide a more detailed conceptualization of injured workers' expectations, concerns, and personal experiences.

Individual participants were brought into a quiet room one at a time for personal interviews. A one- to two-hour period was set aside for each interview to take place. However, the interview days were scheduled to allow for flexibility for the interviews. The rooms were well lighted, exceptionally clean, and appointed with appropriate

furnishings so as not to distract the participants. The participants were allowed to choose a seat and the researcher sat directly across from the participant.

The only media device allowed in the room was a digital voice recorder. No phones or other media devices (i.e., newspapers, magazines, television, etc.) were allowed into the room to eliminate these types of distractions. The participants were asked 12 questions about their work-related injuries which was developed by the researcher (Appendix B). The researcher provided a copy of the questions to each participant and then read each question aloud. After each question was read aloud to the participant, the participants were asked to re-read the question back to the researcher. The purpose here is twofold: first, to ensure literacy among the participants and second, to ensure the participants understand English.

Instrument of Measure

In the qualitative construct, the researcher is the instrument of measure (Leedy & Ormrod, 2005). The study gathered data from the participants' perspectives in relation to the participants' thoughts, feelings, and personal experiences in relation to the respective occupational injury. Data were gathered face to face, through semi-structured open-ended interview questions. All participants shared a job description of "automotive assemblage worker" within the state of Michigan. The researcher constructed the instrument used for this study. A one- to two-hour period was allotted for the interviews. Nevertheless, allotted times were adjusted accordingly allowing the flow and development of thick descriptions within the contextual data, thus enhancing the

measurement's validity and reliability. The participants were asked 12 questions to help elicit data on their experience with their occupational injuries (Appendix B).

Validity and Reliability

The validity and the reliability of the study were enhanced through the compilation of data collected during interviews. Phenomenological research is discovery-oriented as compared to hypothesis-oriented (Morse, Barrett, Mayan, Olson, & Spiers, 2002). Guba and Lincoln (1981) described the rigor of qualitative research as trustworthiness. The requirements to assure trustworthiness are credibility, transferability, dependability, and confirmability (Guba & Lincoln, 1981).

Total elimination of bias is unrealistic. As means to reduce bias in the study, the researcher invoked the following measures: (a) triangulation – examination of data from the various types of recording (audio and field notes) devices, (b) member checking – having the participants review the written description of the participants' experiences as recorded, (c) also through a rich thick description of events, and (d) peer debriefing to enhance accuracy further (Creswell, 2003; Neuman, 2006).

Data Collection Procedures

The interviews were conducted at a mutually agreed upon location between the participant and the researcher through a face-to-face methodology. Prior to their participation, individuals were provided with a verbal description of the study. After the participants agreed to be studied throughout their course of their treatment, the participants were given consent forms in order to partake in the study. The data collected

included the participants' overall experiences, expectations, and outcome perspectives. Though this procedure is the most costly tool for interviewing, it permits a longer, more in-depth questionnaire, resulting in better response rates (Neuman, 2006). This researcher postulated that themes would materialize as data were collected from the study.

Data Analysis Procedures

Participant interviews were audiotape recorded with the participants' knowledge and then transcribed verbatim by the researcher to ensure accuracy. Each participant received a copy of his or her individual transcript, which could be reviewed for accuracy as recalled by the individual participant. The participant was then allowed to review the individualized audiotaped session for accuracy of the transcripts and then the written transcripts were changed as necessary per the participants' requests. The data were open-coded initially to create conceptual categories and themes. The themes were then bracketed and the data were axially coded as concepts were drawn to identify juxtapositions, followed by selective coding of data (Neuman, 2006). Coding was performed so as not to allow for any identification of personal data. The qualitative code-based software builder HyperRESEARCH™ version 3.5 was utilized for data interpretation.

Limitations of Methodology

The sampling of participants in this study may limit the generalization of the results to other occupations and patient populations. Michigan has a heavily unionized

workforce and trade unions are often protective in regards to their members. Participants who are union members may require union approval prior to participation in the study. The small sampling size, individual characteristics, and the potential for selection biases may also contribute to the outcome of the study. Thus, due to the type of sampling, the conclusions of the study may not be applicable outside of the population studied. Another consideration limiting the study may be the actual severity of injury suffered by the injured employees. This severity may exclude certain participants from the study by the way of bypassing occupational medical clinics in lieu of emergency rooms, thus not being treated by an occupational medical provider. This is especially true if injured workers are transported via ambulance to local emergency departments. Lastly, numerous lower back injuries may go unreported by employees in fear of employer and/or peer reprisal.

Internal Validity

A number of the participants' excerpted transcripts are included for the readers of the study to interrogate and interpret. The intent of this qualitative credibility check is to ensure that there is accuracy among the maintained data in order to give a true representation of the participants as the researcher portrays the participants' point of view. Additional credibility was enhanced through prolonged substantial engagements, triangulation, member checks, and persistent observation of salient issues (Mertens, 2005).

External Validity

In qualitative studies, external validity is synonymous with transferability and is represented through thick descriptions and multiple cases (Guba & Lincoln, 1981). Thick description of content through multiple cases was provided so that that the reader of this study can compare and contrast just how well the study represents the participants' own conditions and whether it is applicable to the participants' personal needs. As the IPA is very specific to the geographical setting, injured area, occupation, and personal lived experiences, no generalizations should be made from the study.

Expected Findings

Based upon the current literature, it was postulated that themes related to the experience of the injured workers who are treated at occupational medical clinics would appear, and that these themes were likely to be specific to this type of clinical practice (OM). These emerging themes may help to identify further concepts that may need more, in-depth, or broader research, which may allow a better understanding of the multifaceted etiologies of LBP and the intricate relationship between the occupational provider and the injured worker.

Ethical Issues

The autonomy of the participants was protected, as strict confidentiality was observed in accordance with the Health Insurance Portability and Accountability Act (1996). Data collected were not linked to individuals, employers, or any other identifying data (Holt, 2003). The intent was to eliminate identification of the participants through

any search parameters. This was especially important as sub-populations within certain search parameters (e.g., age, employer, occupation) were entered and coded.

In accordance with the National Research Service Award Act (1974), organizations and universities conducting biomedical or behavioral research on humans require the approval of an institutional review board (IRB) (Mertens, 2005). The intent of the IRB is to protect the rights, privacy, confidentiality, and welfare of human subjects (Holt, 2003). Once IRB approval was secured, informed consent was obtained from each individual before any participation was allowed. Equitable sampling was encouraged through the participation of male and female assembly workers alike. Participants of the study benefited by receiving a $50 gift card and the risks of the studies were minimal; nonetheless, they could not be excluded. The participants were encouraged to ask questions before, during, and after their participation. If at any time during the study, a participant wished to withdraw, he or she could do so immediately, without question, hesitation, or any suggestion of reprisal by the researcher.

As mentioned above, the confidentiality and privacy of the participants are of great concern. Nevertheless, this type of research may be viewed in a negative manner in regards to ethical practices. The researcher sought to ensure that no influence was exercised through the researcher's current employer and position or that of the employed participants. Scrutiny by union representatives within the research study was anticipated and could not be excluded.

The participants' data for this study were stored on the researcher's personal laptop computer and voice recorder. All of this equipment was stored in a fireproof safe

with a combination that was known only to researcher. The data will be stored for seven years and then destroyed.

Chapter 3 Conclusion

The research may suggest further studies are needed in other populations, and perhaps over a longer period, before clinicians fully understand the implications of injured workers' experience within the OM setting. This report should not be viewed as evidence that back injuries occurring at the worksite are insignificant. Nonetheless, especially in lieu of objective findings and within the arena of OM, there are additional factors, which are reflected in a patient's attitudes, self-motivation, and behaviors that the occupational clinician may need to entertain.

CHAPTER 4. DATA COLLECTION AND ANALYSIS

Introduction

The purpose of this phenomenological study was to record and analyze the lived experiences of older, injured automobile assembly workers. The in-depth interview with each of the volunteer participants lasted less than one hour. The data obtained from the research provide additional information to occupational clinicians, employers, and insurers and extend their knowledge about the personal lived experiences of their patients, employees, and clients. The main purpose of this chapter is to describe the characteristics of the survey's sample, including age, sex, occupation, and employment status. This chapter presents the data that were manually gathered, analyzed, and organized into themes. Direct quotes from the automotive assembly worker are included, followed by data collection description, analysis, and identification of major themes. The study addressed the main research question: What types of attitudes, behaviors, and self-motivators do older automobile assemblage workers exhibit after injuring their lower backs at the worksite? Additionally, the study addressed three corollary research questions:

1. How does an older individual feel after being hurt at his or her worksite?
2. How does an older individual feel about returning to his or her worksite after being injured there?
3. What motivates an older, injured worker to return to the workplace?

Data for this study were collected from the lived experiences of ten voluntary participants engaged in automotive assemblage work in the state of Michigan. Participants were recruited through passive purposive sampling.

Descriptive Characteristics of Study Participants

It should be noted that all the names used in the research are pseudonyms to protect the participants' confidentiality. The participants self-identified as automotive assembly workers. Ten participants ($N = 10$) consented to share their personal lived experiences through face-to-face interviews. The participants consisted of eight male ($N = 8$, 80%) and two females ($N = 2$, 20%). All of the participants are of European American descent. The participants' ages range from 55-63 ($M = 56.8$) years old. The years of employment as an automobile assemblage worker range from 18-37 ($M = 29.9$) years. Six of the participants ($N = 6$, 60%) are currently employed as automotive assembly workers and four ($N = 4$, 40%) are retired automotive assembly workers.

Sample

After IRB approval was obtained, a passive recruitment was conducted. The research was conducted within the state of Michigan. Recruitment flyers were left at several local establishments frequented by automobile assemblage workers. Interested participants contacted the researcher. The ten participants who contacted the researcher met the criteria for the study and readily agreed to meet and to be interviewed. The participants were reminded that their participation was strictly voluntary.

Each participant is or was an automobile assembly worker. Specific job descriptions of the participants included painter, welder, electrician, material handler, and skilled trades; all are within the desired automobile assemblage worker heading. Each participant was injured while performing his or her respective job. Six participants are full time employees and four participants are retired. One of the retirees has recently

retired from the shop after thirty years and has since entered a second career and returned to the shop in a managerial position. The participants were given a copy of the 12-question survey form and asked to read it aloud. The participants were allowed to read and then sign the informed consent to partake in the research. Each participant demonstrated a command of reading and writing in English. The participants were reminded to ask questions without hesitation during the interview process. Although racial diversity was sought, the entire sample was made up of Caucasians.

Qualitative Phenomenological Approach

A qualitative phenomenological approach was chosen for the study, which involved a sample size of ten ($N = 10$), all of whom were injured at their jobs in the automobile assembly shop. According to Moustakas (1994), qualitative research provides an in-depth focus of a particular phenomenon by focusing on the quality of the information received, rather than the number of participants used to gather the said information. Using smaller samples and placing the focus of the study on the individuals' personal lived experiences of a certain phenomenon achieves this in-depth focus.

The data collected during the formal interviews with the participants are direct accounts in their own words of their personal lived experiences. Interviewing multiple individuals, each with a different lived experience regarding the same phenomenon, allows for the emergence of themes, which helps expound upon the phenomena during data analysis (Moustakas, 1994).

A semi-structured interview approach was used with each participant. Light conversation was made with each participant to make him or her feel relaxed. Speziale and Carpenter (2007) reported that when a participant feels comfortable he or she is more likely to share more data with the researcher. This technique was found pertinent, as the participants were willing to share more information, as they were self-assured that the researcher was not misrepresenting himself as a researcher. As shared by multiple participants, there had recently been an internal attempt to defraud automobile assembly workers with the type of interviews the researcher was conducting. The use of inclusion brackets within the participant's verbatim interviews is intended to aid the reader, not to alter the contents of the participants' interviews. Permission to incorporate the aforementioned grammatical adjustment was requested and secured by this researcher during the interviewing sessions.

According to Creswell (2003) small samples make transferability more difficult. Nonetheless, a researcher can enhance a study by taking precise notes in regards to the research context and central assumptions to the research. Field notes were used by the researcher to help capture the participants' body language.

Data Collection

Semi-structured, one-on-one interviews were conducted at mutually agreed upon public places. Informed consent was gained and the interviews lasted approximately one hour and were audiotaped. Each of the interviewed participants was allowed to choose the public place for interviewing so that each individual would feel comfortable and be as forthright as possible. None of the interviewees reported any further concerns regarding

their choice of public interview sites. The sites themselves consisted of popular local restaurants and local drinking establishments. The drinking establishments were referred to as shop bars as they were located in close proximity to the area of the automobile assembly shops.

The researcher had initially desired to perform these interviews in a quieter setting. However, during the recruitment phase the potential participants made it known that they felt "personally … more comfortable" speaking to the researcher at a site they had chosen. Thus the researcher went to where they wanted to meet for the interview. It is posited by the researcher that this in itself produced richer personal textual descriptions of the participant's experiences.

Upon completion of the interviews the researcher immediately listened to the recorded interviews several times, making personal notes regarding each participant's non-verbal communications. This was done in order to capture the meaning and essence of the participant's thoughts fully. All participants were offered copies of their personal interviews for review and correction. Only one participant asked for the transcript for personal review. The participant did not indicate any misrepresentations of data in the personal interview on the researcher's part.

A qualitative phenomenological construct allows detailed exploration of the participants' personal lived experiences and how they qualify or make sense of their experience (Smith, 2004). This type of construct allows for a deeper, richer, more in-depth understanding of the phenomena being studied. The intent of this study was to understand the situational experiences and meaning as seen through the eyes of the

participants (Giorgi, 2002). The data obtained from the older, occupationally injured automobile assemblage workers were categorized into themes that were then used to describe the participants' personal experiences.

On the day of his or her respective scheduled interview date, each participant was allowed to meet at his or her public location of choice to help enhance the desired, maximum engagement of participants. Opening comments by this researcher were followed by a review and discussion of the informed consent. Afterwards each participant was allowed to ask questions in regard to the study. If the participant agreed to be in the study, he or she was asked to read and then sign the informed consent, which this researcher maintains securely; then the formal interview began. An audio recorder was used to capture the entire interview. Interviews lasted between 40 minutes and 1 hour.

Participants were assured that their confidentiality and anonymity was of the utmost importance to the researcher. The researcher and the participants agreed that pseudonyms would be assigned to each participant to ensure further anonymity during the transcription of data. The interviews were conducted over a one-week period in the state of Michigan.

Data Analysis

The findings from the data analysis present a summation of the research participants' responses to the interview questions about their personal lived experiences as older, occupationally injured, automobile assembly workers. Interview questions were designed to explore the personal lived experiences of these injured workers. The research

participants were interviewed and audiotaped with the participants' consent and the data were transcribed verbatim. The methodology utilized by the researcher was a phenomenological approach using the participants' exact words to facilitate the meaning and essence of what was said.

Utilizing the Giorgi (1985) four-step method of data analysis, the data were then (a) read in order to capture the sense of the experience, (b) re-read, this time looking for common threads or meaning units for the phenomena being researched, (c) assigned to meaning units to identify the psychological insight present, (d) synthesized and described as a structure. The structure then guided the analyses and justified the decisions made during the data-analyzing phase.

There was no departure from the planned data analysis. Creswell (2003) reported that in qualitative research the researcher starts by analyzing raw data into codes; then after combining codes, themes appear. The participants' responses were coded and analyzed separately. Codes were assigned by giving each participant response a code. As responses to the interview instrument were input, the participants' answers were placed within an existing code when one was available. Participant answers that did not have an existing code were given a new code and subsequent answers were coded accordingly. Assigned codes that was similar or was identified as duplicate codes were merged together for continuity. The data collected were then further synthesized and a thematic analysis was performed, by utilizing the qualitative software HyperRESEARCH™ version 3.5.

The assignment of codes to phrases and concepts allowed the researcher readily to identify the frequency of phrases and concepts. The concepts and phrases were then used to identify themes. The themes were further utilized to help describe the personal lived experiences of older, occupationally injured automobile assemblage workers. The researcher compared the synthesized data from the software HyperRESEARCH™ version 3.5 and the manual analysis to organize present themes, subthemes, and quotes from the participants.

Data were coded and separated into categories to generate themes critical to the central question: what types of attitudes, behaviors, and self-motivators were exhibited by older automobile assemblage workers after injuring their lower backs at the worksite? The central research question was further supported by three corollary research questions: (a) how does an older individual feel after being hurt at the worksite, (b) how does an older individual feel about returning to his or her worksite after being injured there, and (c) what motivates an older, injured worker to return to the workplace? A final question gave participants the opportunity to share their personal opinions in reference to how they would like to change the workers' compensation system in Michigan based on their personal experiences.

Themes

The data were coded and separated into categories to generate themes underscored by the central research question. Themes explain the phenomenon of the participants' lived experiences. The researcher conducted a review of data individually to ensure validation. The review conducted by the researcher further ensured that the

actual statements provided by the participants indisputably expressed the themes selected. The categories and themes resulted from the participants' explanations of their personal lived experiences. The interview process with the older, occupationally injured automobile assembly workers contributed to the answers to the research questions.

Three predominant emerging themes were identified as critical to the central research question: (a) lack of empathetic care, (b) return to work motivators, and (c) transformable processes. In addition to the three aforementioned themes, multiple sub-themes were identified. Participants were able to identify with most themes, but not all of the participants shared the same themes, as their lived experiences differed.

Descriptions of Individual Participants' Themes

The researcher arranged a concise written description of the themes of each participant's interview that communicated his or her lived experience with occupational LBP. The written descriptions were in unified with the categories of themes and sub-themes alike. To provide further anonymity and confidentiality, participants were given pseudonyms for the summaries.

Theme I: Lack of Empathy

The sub-themes in this category are as follows: (a) distrust, which was mentioned by nine of the participants; (b) restricted work activities, which was identified by six of the participants; and (c) deniability of claim, which was mentioned by five of the participants (see Table 1). A summary of the participants' responses is given in this section.

Table 1
Lack of Empathetic Care

Sub-themes	Number of participants having this experience	% of participants
Distrust	9	90
Restricted work activities	6	60
Deniability of claim	5	50

Summarized Textual Description for Participant 1: "Agnes"

Agnes is a 63-year-old female who had worked in the automobile plant for 25 years. She initially started as an automobile assembly worker within the shop as a line worker. After a few years as a line worker she transitioned into the skilled trades. She finished her training and apprenticeship and then ended her shop career as a journeyman tinsmith. She mainly worked the nightshifts, as she was a single mother; this type of shiftwork afforded her the lifestyle that she needed. The nightshift also paid more. She worked at multiple locations within the state of Michigan throughout her career; however, she was medically retired after 25 years of service while working in an automobile assembly plant in Michigan.

Agnes reported that she "initially injured her lower back when she was about 29 years old." However, throughout her career she had numerous injuries to her lower back and was treated at the medical clinic in the shop. The last significant injury of her lower back occurred when she was about 50 years old, which is when she had her first back operation. Agnes was injured at work while working as a tinsmith. She was a metal

worker and often used 4 foot by 8 foot metal sheets to perform her job tasking's. She indicated that her job entailed making "ductwork, toolboxes, and smoke stacks throughout the assembly plant." Agnes recalled that at times "fork lifts were available," but often the material had to be moved manually and it "was very heavy and required four workers to move the material."

Agnes described her experience with distrust. She reported that even though she "was a female" she was expected to do the same work as her male counterparts and she further indicated that she suffered from an "enormous amount of sexual harassment." She described her experience of being injured on the job as a nightmare.

> Not only am I a woman, but [also] I am a large [overweight] woman with a bad back. I did not expect to be cut any slack because I was a woman. I was actually the team leader and even though my back was hurting I just kept on working. If I did not work, how was I supposed to expect my team to work?

Agnes described her reason for seeking out her personal doctor:

> I went to see my personal doctor because I knew that he would give me something stronger than the shop [clinic] for my pain. I went to see my personal doc because of this. Because if I didn't go to work, then I didn't get paid!

Agnes experienced a lack of empathy, distrust, and deniability:

> Whenever I went to medical I would get Tylenol™ or Motrin™ and maybe some ice. They just don't care. I never had X-rays there or even saw the doctor. I would just see the nurse. It was as though they want to pretend that injuries never happened. I never received any restrictions for my back from them [the shop clinic]. To receive restrictions would have meant that I would have been unable to do my job, which would have put me out of work. If you are on sick leave you get paid substantially less than what you would make if working. That is why I went to see my doctor. So I would [could] just stay working. Initially I received Tylenol™ with codeine and that progressed to Vicodin™, but at least I was still working and making money.

Agnes received empathetic care from her personal provider after injuring her lower back at work. Agnes indicated that she felt "more comfortable" seeing her personal physician. Agnes said "I have seen the same doctor for years and he knows me." Agnes described that she felt as though her doctor understood her better. "Originally I did not understand that part of my back [pain] was because of heavy lifting … climbing … and carrying of heavy objects." In the end "I saw a neurosurgeon and I had my first back surgery in 2000 … and my second one in 2005. That is when they put a plate and five screws in my back."

Agnes received validation of her occupational related injury and concerns from her personal care provider:

> My doctor told me Michigan was one of the highest risk states for lower back injuries and for lower back problems. My doctor kept telling me I couldn't go back to work or shouldn't go back to work and he [personal physician] told me that he would support me in a work comp case. But I talked him [in]to letting me go back to work with restrictions. I felt that I was ready to go back to the shop. I knew that I could not do my regular job, but I could at least do some restricted work. So my doctor finally relented and let me go back to restricted work. Now that I know what I know … I wish I had not pushed it to get back to work so soon.

Agnes described her experience with the restricted work she received:

> I did try to go back to work with restrictions after my first surgery because I had been out four months. They [the employer] placed you in this area called [rehab area]. They give you senseless work to do just to keep you from going out on comp. Like one of the jobs they gave me was to sort nuts and bolts. Other times I would have to just sit there and clean parts or monitor a computer screen. It was just a bunch of senseless made-up work. I felt like I was being punished for being injured at work. I mean really … I was trying to make an effort to come back to work and this is what I get to do.

Summarized Textual Description for Participant 2: "Marvin"

Marvin is a 55-year-old male who has worked for the past 36 years in the automobile shop. Marvin currently works as a material handler. Marvin reported that his job consists of "moving parts and stuff [stock] on and off the [assembly] line in order to keep production on track … and that is the bottom line: keep the line working." On the day he was injured at work, Marvin reported that he was "removing stock from an upper rack and the rack broke loose and I fell against the truck and twisted my lower back."

Marvin described his experience with lack of empathetic care and distrust:

> I went up to medical [the shop clinic] they gave me ice and sent me back to work. They sent me back to work still hurting.… See initially you get evaluated by the nurse there at medical [the shop clinic] and then if you keep bothering them or going back enough then they schedule you to see the plant doctor. And they [the plant doctor] actually work for the company or plant. Each day I got the same treatment, then finally I saw the plant doctor and he prescribed me some muscle relaxers (Naprosyn™) and told me to come back and see him in a couple of days. The next day I was urinating blood and I was a little worried so I went to see the doctor [the shop doctor] and he sent me to see my doctor. My doctor told me to quit taking the Naprosyn™ because it was *really frickin' bad* for you. From that point on I did not trust them and I followed up with [my personal] doctor on my lower back [injury]. You know what I mean, I was not going to go back there [to the shop clinic] and risk anything else [bad happening].

Marvin was not placed on any kind of restricted work status and was therefore expected to perform his normal job as a material handler. Unknown to Marvin, Naprosyn™ is not a muscle relaxer, but a non-steroidal anti-inflammatory medication and is used for mild to moderate pain.

Marvin indicated that after his injury he "changed his approach at work" by asking others to perform certain tasks especially when the job required "retrieving [stock]

from high or low heights." While at other times Marvin would "do what it took to keep the line going."

Marvin described his experience with deniability and distrust:

> I have the option to ignore it all [his pain]. Personally, I would have rather just had the option to be able go home and rest after getting hurt. But if I was really hurt badly at work and I did not report it, there would be no record of it [the injury]. Then I would have only been entitled to my own sick leave and not Workmen's Comp so in turn when anybody in the plant gets hurt they usually go on to report the injury. Even if the injury was minor at first it may turn into something major and if you don't report it your claim would be denied.

Summarized Textual Description for Participant 3: "Jimmy"

Jimmy is a 58-year-old male who had worked in the shop for the past 34 years. He described his experience as "being lucky … I feel a lot older than 58." Jimmy said that he has seen "people get hurt in the shop and not make it back to work … at least I can still get around." Jimmy said that he was not indicating that they [his co-workers] were "hurt that bad … beyond repair … but they just never did come back to the shop." Jimmy recalled his experience of being injured a "few months" before deciding to retire. Jimmy indicated that his job description was that of a material handler. He was operating a "tugger" to move parts up and down the line when he inadvertently "hit another tugger head-on." In doing so, he reported, he injured his lower back.

Jimmy described his experience with a lack of empathetic care and distrust:

> I went up to medical [the shop clinic] and the nurse gave me some ice. I had to convince her that I needed something more, so she gave me some ibuprofen and Tylenol™ … then I was told to get back to work. Only one coworker I ever [knew] received a disability retirement due to a work-related injury. I mean can you believe it? I had just had an accident and they were already blaming me. I think the other guy was hurt too but he did not go to medical.
>
> When asked, "Why not?" Jimmy did not hesitate with his answer.

> Because of the fuckin' hassle they give you there. I think that if my arm was cut off they'd make me go back to work … ya know what I am saying. Them bastards just don't care about you. The shop doctor doesn't give a flip if you got hurt or even if you lost an arm. The bottom line for him [the shop doctor] is to get you back to work.… Christ, that was the first time in 15 years that I had been up there … they just don't care. That is why a lot of people just say screw it … I will just go [and] see my own doctor and be treated better. It's like I got to prove to them [the shop doctor] that I was actually hurt … and that ain't the way it is supposed to be.

Summarized Textual Description for Participant 4: "Wayne"

Wayne is a 56-year-old male who indicated that he has worked in the shop for the past 27 years. He is a material handler inside the shop; however, he works skilled trades outside of his normal employment. The reason that he indicates that he does not perform skilled trades within the shop was that it "affords him a lifestyle that is more attractive to my family's personal way of life." Wayne stated, "I have kids who are actively involved in sports, as am I. If I were skilled trades, I would not have the luxury of attending their sporting events."

Wayne recalls when he was hurt. "I just so happened to pick up a tote [parts bin] and twist[ed] wrong as I was lifting up and out as the rack was too high.… I felt a pop in my lower back and down I went." Wayne indicated that his pain was so intense that he could not move "and that they actually called that plant ambulance to come out and scoop me up they took me to the medical [shop] clinic and from there I went directly to the hospital."

Wayne experienced distrust and a lack of empathetic care. It is Wayne's personal belief that the shop medical personnel have "been there for years" and furthermore the "medical workers are programmed to help the company and not the injured worker."

Wayne further stated, "I think pretty much he [the shop doctor] is there to get you back to work … or make you prove that you are not able to work." With a reserved smile, Wayne indicated that this is the "typical treatment … non-narcotic medications and ice. That is the type of medical care you can expect when you go up to medical here."

Wayne's frustration with his care continued once he arrived at the local hospital's emergency room. Wayne states, "Even though I was placed on a morphine drip to control my pain, after four or five hours they called my wife and said that I was good to go and I was sent back to the plant." Wayne continued, "They [the ER personnel] just didn't want to get involved in the middle of a Workmen's Comp case." Wayne indicated that his pain was masked with the pain pills that he was given. "I felt better, but my back was still hurting … but I was in no shape to go back to work right then."

Wayne described how he further experienced distrust. Because he was still hurting the next day, Wayne went to a second hospital emergency room and then a third and he was given the same diagnosis: "it's just a back strain." Wayne admitted, "I was really getting frustrated. I just can't believe I was hurting that much … from just a strain. It was like no one wanted to touch me because I was a comp [Worker's Compensation] case." Finally, during his fourth emergency room visit, he was admitted to the hospital, which was soon followed by emergency surgery on his lower back.

Summarized Textual Description for Participant 5: "Bill"

Bill is 55-year-old male who has worked in the shop for the past 18 years. Bill stated, "I am a material handler." He indicated that his main job is to operate a tugger. A tugger is a three-wheeled scooter, which is utilized to "move parts and pull freight." He

indicated that the material that he moves with the tugger "weighs between 100 and 1000 pounds."

Bill experienced a lack of empathetic care and distrust. Bill said that after using the tugger one day, he hurt his lower back. Bill stated, "I hurt myself as I was pushing one of the racks back into place." He admitted to having a "severe pain … but I continued to work." Bill reported that he continued to perform his job as usual, but then he experienced another pain. "After the second time it happened that day, I called my boss over and said 'something just doesn't feel right.'" My boss said that he would take me up to medical [the shop clinic]. Bill stated, "I got some ice and I was sent back down to go back to work." Bill recalled that he informed the nurse that he was unable to perform his job and "she sent me back down there [to the worksite] anyways. I don't know why she didn't let me go home." Bill indicated that when he informed his boss of what had just occurred, his boss "just told me to go home." Bill indicated that he was still in pain, so the next day he decided he would go and see his personal doctor. After doing so, he was placed on "sick leave."

Bill experienced a lack of trust through the restricted activities he was allowed after being hurt. Bill reported that he had been on sick leave for the past eight-week period. He indicated that his doctor even recommended that he return to work with "restricted activities." Bill smirked, "figures now I am out of work and probably only get a third of what [worker's] comp would pay." Bill reported that he is frustrated "with the good old boy system" and that he went to the union "for help because he had been denied worker's comp." But he said "that after I showed them my restricted work papers the

lady signed me into the work comp thing." Bill stated, "You see if they like you … they [the employer] will take care of you." Bill hesitated for a moment, and then added, "That was the really frustrating part.… I did not receive any payments for 7-8 weeks; I just got my sick leave." Bill alluded to this as being a financially difficult and draining time: "You talk about your savings going fast. I will never recover my losses. I really got a raw deal there and lost a lot of money."

Summarized Textual Description for Participant 6: "Mike"

Mike is a 55-year-old male who worked in the shop as an automobile worker for 31 years. He is currently retired. He described his job as "skilled trades." Mike described his injury as a "slip and fall due to a wet surface." Mike indicated that he injured not only his lower back, but also his middle and upper back.

After his injury occurred, Mike stated, "They sent me up to the shop clinic, which is like a First-Aid station." Mike quickly discerned that this area is ironically named a "First-Aid [medical] station." He says this is a misnomer because "they don't do stitching, no crushes [crush-type injuries], breaks, tears, or anything else that is major like that." He stated, "For anything like that they would call an ambulance." Mike is well aware and quick to point out that the shop environment is not a benign place for serious injuries. He recalled numerous events over his 31 years of work experience that were "violent enough in nature" that they ultimately resulted in the death of a coworker.

Mike experienced a lack of empathetic care and distrust. Mike voiced, "no one cares up there [at medical] … they don't do X-rays … they are on incentives to keep you at work and they hold on to you for 10-15 days and maybe send you to physical therapy."

Further complicating his frustration are the numerous legal interpretations concerning workers' compensation law. "If you go to ten different attorneys and ask the same comp question … you will get ten different answers." Mike added more by saying, "This is a mysterious, complicated system."

Mike experienced distrust with his work restrictions. Adding further angst to Mike's experience with worker's compensation was the "demeaning task" assigned in the rehabilitation work center for the injured worker. All the participants within this research study commonly referred to the injured workers rehabilitation center as the [rehab area]. This [rehab area] was an area to which injured workers were sent to perform work duties. Mike stated, "These restricted duties were assigned to keep you from going out [without] work … see they [the employer] want to keep you working." In Mike's opinion, this type of restricted work activity in turn would keep the injured worker from collecting "Workman's Compensation pay."

Summarized Textual Description for Participant 7: "David"

David is a 55-year-old male. He has worked in the automobile assembly shop for the past 31 years. He is in the skilled trades and he works as a painter. He hurt his back "a few years ago." When he was injured in the shop, he was "pushing a trolley cart on a track." David explained that the cart got stuck so he "really put an extra effort into the push and by doing so he hurt his lower back." David recalled that he had intense pain and he "was working the graveyard [third] shift and they sent me directly to the emergency [room]. They sent me there in a cab." David recalled, "I was diagnosed with a torn tendon in my back." David said that he left the emergency room "at about 4:30 but

I had to get a ride back to my truck" because he was still under the effects of the medications they had given him.

David experienced a lack of empathetic care, distrust, and deniability. David said that that night "he had to have his wife pick me up and take me home." The next morning he was called at home "from the office lady" and was "told to come into work so the shop [doctor] could see him." David recalled feeling a sense of frustration as he had been released from the emergency room just hours previously and he had to call his wife for a ride home from there. Now he had to call her again [at her work] and have her take him back to his work. Just so the "shop doctor could re-examine him."

David reported that his frustration was compounded when the "office lady" told him that if he did not come into work right then it would be considered a "refusal of care." Not wanting to face further conflict, he agreed to come into work. As David had expected, after the shop doctor re-examined him, he was given "restricted work and sent back to the worksite. I was taking Vicodin™ and I was on crutches. You would think anyone with a brain would not want me at work with that combination alone." When asked what he did for his restricted work, he said that his supervisor "put him in a room to monitor a computer screen … it was all made up work … so they could keep me off Workmen's Comp." David indicated that the next day he went to "see his personal doctor and he was taken off work." "I had to go through all that hassle [seeing a personal doctor] because [my employer] doesn't care … all they care about is saving money and making cars."

Summarized Textual Description for Participant 8: "John"

John is a 56-year-old male who recently retired from the automobile assembly shop after 32 years. John believes his lower back injuries "cumulative over time." John recalled "going up to medical for treatment but it was a farce. So I never went back up there."

John experienced a lack of empathy and distrust. John experienced frustration with medical care when he said, "their doctor will just say there is nothing wrong with you and [send] you straight back to work. And that is where the arguments start." John indicated that he "knows of people who hurt themselves at home but then hobble into work and 'get hurt at work.'" He smirks, "it's more lucrative that way … sick leave does not pay near as much as Worker's Comp." John stated,

> The system is broken … and a lot of people abuse the system. For example, I know that there are guys sitting around this place that are nearing their 30-year mark, but they all of a sudden 'got hurt at work' and now their retirement is higher than mine.

John believes his experience with individuals taking advantage of the workers' compensation system is why the system is broken. John expressed a sense of pride by saying, "but that ain't me, I went to work every day, I wanted to do it the right way."

John explained, "I have saved my pennies and I can live well and not have to worry with knowing that I cheated the system." John expressed his feelings when he said:

> There are a lot of people out there that have screwed up the system. And when someone really gets hurt at work and needs money to pay their bills … that is when they [Workmen's Comp] denies, denies, denies. And then the injured worker give(s) up fighting the system and comes back to work.

John says, “some people will go out and get a lawyer, but sometimes it takes years to resolve … and people have bills to pay … people can’t survive like that … so they just give up.”

John, sternly, voiced his frustration and distrust with the shop doctors when he reported:

> They always made you feel like they were looking down their noses at you. Like you were beneath them or lesser of a person because you worked in a shop. They always looked down at you like they were better than you. I always felt that no one like no one should ever be treated like that you know. Nobody in the world should be treated that way, I mean hey we are all men … but bad, that is how you are going to treat me when I your need help.

Summarized Textual Description for Participant 9: “Clayton”

Clayton is a 56-year-old male. He recalled injuring his lower back at work when he was 49 years old. He has worked in the automobile shop for the past 37 years. Clayton recalls the day that he hurt his lower back vividly:

> I am a heavy press mechanic and I crawl up and down big machines with extremely large wrenches, chains, and breaking equipment. I was trying to stand on one thing and to stretch over and balance myself on something else.

At this time Clayton said that he had “reached up and [begun] wrenching and that took a long period of time standing in that strained unbalanced position.” Shortly afterwards, his lower back became “tight and painful.” Clayton explained that he “was going on pre-planned vacation the next day and my back just became tighter and tighter every day. Until eventually it put me down and I couldn’t walk or move.” Clayton explained his experience with his pain: “It was so bad I couldn’t drive a car and it was so sharp that it made me puke.”

Clayton experienced a lack of empathy and deniability. Clayton recalled that he was only on vacation for a few days and then he went back to work. Clayton immediately realized "that he was not going to be [classified as a] Work Comp injury," so he continued to see his personal doctor. "So no official report of the injury was done but my doctor knew I hurt myself and that made it dicey." Clayton has worked in the shop and as a supervisor for many years. Nevertheless, the way he understands workers' compensation is that he "would have to prove that it happened in the shop," even though his supervisor acknowledged that Clayton had hurt himself the day before he went on vacation. He indicated that his story was more complicated by the fact that right after he hurt himself at work he went on vacation and "it was therefore a gray area." Clayton angrily stated:

> I gave them 30 years of solid work … and I gave them everything my body had to give; then after one incident I got hurt … and when I needed them most, they turned their back on me and accepted no responsibility. Do you know how frustrating that is?

Clayton related that he was so frustrated with his pain that he went to his personal doctor who aptly placed on him on some "heavy duty pain pills and sent me to physical therapy."

Clayton emphatically stated, looking back at it,

> I am really thankful that [my employer] has good health insurance. I used a whole bunch of it … but that insurance company had to pay for my treatment and surgery, not Worker's Comp, and that is not fair to them.

Clayton recalled that he "was in a lot of pain" and that he was having difficulty performing daily tasks like "standing to brush my teeth, going to the bathroom … I couldn't even go to the bathroom without my wife helping me." After his physical

therapy was no longer giving him relief he was then sent to a "back surgeon and had a laminectomy surgery on L-4 and L-5."

Clayton admitted, "When I went back to work my partners took care of me. I had to learn that I could no longer lift what the younger man could lift."

Summarized Textual Description for Participant 10: "Lynn"

Lynn is a 59-year-old female who has worked in the automobile assembly shop for a 28-year period. Lynn indicated that she is a forklift operator and enjoys her job. Lynn readily admitted that when she hurt her lower back, her experience with Worker's Compensation "was a nightmare."

She described her injury as a "slip and fall injury" that "occurred over a wet area" and that she "landed on some loose bolts." She described in vivid detail how she felt when she was injured and how she was treated at the medical clinic. "Man that hurt really bad. I felt like I was in slow motion and I could see myself falling." "I said to myself, 'this is going to hurt' and sure enough it hurt like hell."

Lynn described her experience with a lack of empathetic care and distrust. Lynn recalled that her "experience at the medical shop was frustrating and a farce." She explained, "Even though I had physical bruising on my back … no X-rays were ever done. The nurse at the clinic even took pictures." Lynn reported that her level of frustration grew: "when I tried to get to the pictures and report the next day, they were 'mysteriously lost.' I mean really how does that happen?" Lynn described her lack of empathetic care by the shop doctor: "He was supposed to be there on your behalf, but it was painfully obvious that he was there for [the employer]." Lynn said, "I was sent back

to work with restrictions … I just stood around for eight hours … it was ridiculous. I was getting paid, but unfortunately I don't feel like I was earning my money."

Lynn experienced a lack of empathetic care through her restricted work activities. Lynn believes that the only reason that she was given the restricted work was so that she would "not be put out on worker's comp and they would save money … it is always about saving money … they [the medical clinic] don't care about you." Though Lynn had no proof, she adamantly presented a sense of distrust: "Personally, I think they get incentives to put you back to work." Lynn described her feelings about how she distrusts her employer: "the bottom-line here they are in business to make money.… If I don't work, they will find someone else willing to put up with their crap." She felt she was "stuck between a rock and a hard place.… I got bills to pay [and] I am helping raise my grandkids."

Theme II: Individualized Work Motivators

The sub-themes in this category are as follows: (a) money, which was mentioned by all ten of the participants, and (b) self-pride, which was identified by seven of the participants (see Table 2). A summary of the participants' responses is outlined in this section.

Table 2
Individualized Work Motivators

Sub-themes	Number of participants having this experience	% of participants
Money	10	100
Self-pride	7	70

Summary of Money

When discussing with the participants what their personal primary motivator for returning to the worksite where they were injured was, the resounding answer was money. Money was their bottom-line motivator. However, this was not only their overwhelming reason for returning to work, but also their reason for *staying* on workers' compensation.

Agnes declared:

> When I first started going out [of work] for my back, I would just go out on sick leave, which like I said … paid quite a bit less than my normal work wages. I had heard stories and you hear horror stories about all the hell you have to go through to get Worker's Comp, but I would also be off for a week or two, then I would try and go back to work. So, it wasn't really worth me going back to work because all that did was interrupt my money financially.

Marvin remarked:

> It just did not matter if I was hurting. I was not getting paid Workmen's Comp. You have to be off work a week or two before you start drawing on Worker's Comp. I was motivated to get back to work … I could not afford to be off work. I got bills just like everybody else.

Jimmy, who is more pessimistic, remarked:

> See, that is what gets me pissed off.… I got hurt at work, but because of the red tape I went around the system to get treatment and it should not be like that. I could have screwed up my pay starting to claim Workmen's Comp and then I would [have] had to been off so many days. It just ain't worth the hassle. I don't feel that anybody owes me anything. I just want to be able to pay my bills.

Wayne explained:

> I was making about half of my normal wages by being on sick leave. And when it comes to overtime [wages] that is a lot of money. At that time the shop was very busy and we [were] working a lot of overtime. I wanted to get back to work.… I wanted to get some of that too [overtime wages]. I call it the undeniable motivator. People just can't go on living like that not making money if they are out. You finally just give up and that is what they want you to do.

Bill commented:

> That is why I think I should see a lawyer … because of the wages I lost. See, I get like a third … about $300 … of what I normally bring home. And with Workmen's Comp they argue about everything. It was several weeks before they started paying me. You talk about your savings going [away]. I thought I would be going back to work by now, not going further into reverse. Losing money was my biggest motivator to get back to work. I am just worried how this might screw up my retirement.… Now I am worried about my taxes and income when that time rolls around.

Mike's belief is a little different, and insightful in that:

> It is such a matrix, such a maze, to try to figure out and nobody tells you about Worker's Comp, especially the employer. If you are on restricted work you cannot work overtime. I ended up having light duty at work for three to four years. When I hit 31 years in that place, I was second from the bottom on the seniority list. Then, when they offered me a buy-out to retire I took it and retired. As an alternative, maybe they should offer pay bonuses to the *uninjured* [emphasis added].… Money motivates. Doctors are motivated by money too.… The more patients in his practice, the more money he makes.

David's personal view not only involved the injured worker being motivated by money:

> Restricted work was made up to avoid the person from going out on Worker's Comp and this would save [the employer] higher insurance rates. Just like them [the employer], when I make a decision it is based around money. They don't give a fuck about me or making a car … they worry about making money. And by not putting me out they saved themselves some insurance money [increased premiums]. See, you don't have to pay taxes on Worker's Comp.

He said with a smirk, "So being on comp is very lucrative.… I can make about 80-85% of my normal paycheck for sitting at home. That is why they [the employer] wants you off comp."

> So your focus here is back injuries. [Did] you know that back injuries are the easiest injury to fake? They [medical providers] cannot tell if you are faking. There is no way to tell! They can give me every test there is, but they cannot tell

if I am faking! People are fucking lazy at heart. Like, this town is an example. General Motor has been here a long time and everybody abuses the system. Well, not everybody, but a lot do.

John added the following perspective:

I know that there are people here [from work] that were getting near their 30-year mark so that they could have retired under the normal system, but then they went out on disability. Now they get paid more than they would have if they had stayed for their regular retirement. I have seen a lot of that happen and that is why the Workmen's Comp and disability are broke. The system is broke and I would say that a lot of people abuse the system. I have saved my pennies and I can live well and not have to worry with it, knowing that I cheated the system. But, I think that is what has screwed up the system and make it bad for people who really [do] get hurt.

Clayton explained:

It cut my pay basically in half from my standard week's [pay] … plus now I had medical bills to pay too. Well, you know, you don't like to feel bad. You want to be able to take care of your family and do other things. You don't want to feel trapped in this world and that someone else has to take care of you and do things for you. Legally they have so many days to take care of you, or so much time, to play the game, to find a way out. After that time … they have to deal with you. If they had offered it [Worker's Compensation] to me it would have paid me a lot more and helped me out financially.

Lynn indicated:

[They] had an agreement with the union.… If I worked for a non-profit organization, then I would receive my normal 40-hour pay even if they did not have work for me. I *worked* in a few different organizations over that time. I stood around and wait[ed] to do something. Yeah, I was getting paid … it was great, I was getting paid … though I did not feel that I was earning my pay.

Summary of Self-Pride

Older, injured automobile assemblage workers are very prideful. This presence is evident not only in their career paths, but also in their status as related to worker's compensation injuries. Seven of the participants relayed this during their personal interviews. Marvin demonstrated self-pride as follows:

> I went to work because I could work. I could have went in there and limped around and stuff, but there was no need too. I don't want anybody to give me anything. You know, you know that if I am able to work, why stretch it two weeks or buck the system for a year … just because you can?… That just ain't right.

Jimmy stated:

> I still have bad days with my back and sometimes it hurts like hell to get out of bed. It still hurts off and on, but I can live with it. You just get tired of being hurt and you don't want to be crippled or disabled. You want to be able to do things again. You have to have some pride in yourself about what you do. I want to be able to pay my own bills. I don't feel that anybody owes me anything.

Mike, however, stated the following: "Honesty is a virtue that is shared or should be shared among a variety of people. Not just the highly trained, skilled, or paid [employees]."

David indicated that he knew going into the shop that he would sacrifice his body in some way. David, affectionately, said he had "many friends and relatives that were *shop-rats* [emphasis added] before him." David adamantly said:

> My shoulders are fried, my elbows are fried, and my hearing is bad…. I mean I have had days were I have had to crawl into work because my back hurts so bad. I have just figured out to keep it healthy, which is what it is all about a happy back … that is what is key. I am smarter now. I am not as young as I used to be so now I use my head before I try to lift heavy stuff.

John demonstrated his sense of pride in saying:

> I have saved my pennies and I can live well and not have to worry … knowing that I did not cheat the system. I went to work every day.

Clayton voiced his self-pride as follows:

> Well, you know that you don't like to feel bad. You want to be able to take care, to take care of your family and other things. You don't want to feel trapped in this world … so that someone else has to take care of you and do things for you.

Clayton is very proud of the fact that he was able to raise three children and then was able to send them all off to college. He and his wife paid for his children's college educations in full. Clayton said proudly, "Our oldest just graduated with his PhD in mathematics." He continued, "I cannot go back and physically do the jobs I did before, which restricts my job potential.… I can choose not to run out and play basketball every day, but, I like to think that I could."

Lynn described herself as "not the one who just likes [to] sit around [and] do nothing and then get paid for it." She added, "It's great I am getting paid but unfortunately I don't feel as though I am earning my money." Lynn coyly admitted, "I wear an insulin pump and honestly, I don't know if I will be able to afford to retire … that has stopped me from getting two Associate degrees … only time will tell."

Theme III: Transformable Processes

The participants in general believed that their personal experiences with an occupational injury changed them. The sub-themes in this category are (a) personal transformations and (b) systematic transformations (see Table 3). Nine of the participants felt that the workers' compensation system is broken and is in need of repair, whereas six of the participants experienced a change in their quality of life.

Table 3
Transformable Processes

Sub-themes	Number of participants having this experience	% of participants
Personal transformations	6	60
Systematic transformations	9	90

Personal Transformations

The majority of the participants believed that their personal quality of life has changed since injuring themselves at the worksite. Furthermore, eight participants personally felt the current workers' compensation system in the state of Michigan is in need of a change.

Agnes voiced that she never felt the same after her injury:

> I was always totally aware of my back because of the pain, so I tried to make things easier on myself … like a lot of times … if I had the ability I would have help lifting. Sometimes you [can] get help from your fellow workers to do some of the lifting … otherwise you just deal with it. But in my head I was not realizing that it was actually the job doing that to me. My back was never the same.

Agnes admitted that she now recognizes that she had more than just a physical problem with her back. Not only did she become depressed and begin taking medications for that condition, but also, she sheepishly admitted, "I was addicted to painkillers too. I had problems."

> At first I was started on Tylenol™ with codeine and when it did not do any good then I started on the Vicodin™ for my back [pains]. I would just take the Vicodin™ to help me get through my workday. My back is still lousy to this day … and I need a third operation. And there are no guarantees and I could wind up in a wheelchair … and never be able to walk again. It is something that I have to

> really consider … but my quality of life because of my back is next to nil … it's very bad. The pain ages you tremendously.

Agnes took a deeper look into her post-injury features. She recognized a residual effect from her occupational-related injury in the automobile shop.

> It also changes your personality, or the person that you are. [This is] because you are dealing with a lot of pain all the time, so there is a lot of mental stuff going on. There is a lot of depression with back pain. It's because of a lot of reasons, but for one it is because you are in a lot of pain a lot of the time. Number two you cannot do the things you want to do because it totally changes your life. You know some days you can't get out of bed. Some days I can't even go out and lead a normal life with people.
>
> > For example, my daughter wanted me to go look at a couple of homes … and I can't go because I cannot walk around. I cannot go the dress store because I am hurting too bad to take my clothes off and on. I can only shop [in] places where I can push a grocery cart because I need the cart to help me walk. This [occupational injury] has really changed my life.
> >
> > They [the employer] really make it hard on us.… They try to get us discouraged and to say the hell with it … which probably saves them a lot of money in the long [run] because we end up going out on our own and we do not tell [our personal] doctor that this is a work comp injury and so they sent it through our regular insurance. Which in my opinion defrauds our other [traditional healthcare] insurance. But that is the only way a lot of people get relief … circumvent the system.

Marvin admitted that being injured at work changed his perspective on how he approached things. Marvin described the following:

> If I needed to get something I would have somebody else get it or I would get a high-low [machine] to retrieve it.… But at times, that is what you need to do to keep the line working. You don't think twice and just climb up on board [the machinery]. I would just think to myself … I hope that bugger was good and tight this time when I went to grab on to something to hold myself in place.
>
> It did change me a little bit [after the injury] not to be such a go-getter or to be too gung-ho to jump up there on the equipment.… I realized that if I was just to lean a little extra … then I might get hurt again. Now I am more cautious before I do something, I always look twice at the job [task] … and think it through.

Mike is very pessimistic in regards to having any kind of surgery to fix his back injury. He said that he did not feel that his odds of a full recovery post-surgically were high enough for him and until the surgeons where able to give a higher likelihood of success he was "not interested about them butchering me. I have seen too many bad outcomes after people have surgeries. I am not getting any back surgeries until I cannot physically walk." Mike said, "I just really have to be careful. I don't want to end up getting one of them titanium rods or something."

Mike reported that even though he was hurting, he opted to have a procedure called "epidural steroid injections" performed in lieu of any surgery. Mike excitedly explained, "I got three years of relief, I was the exception … usually it does not last that long … maybe [it lasts] a few months." Mike reported "I walk with a cane nowadays because of another work-comp injury in which I crushed my foot." Mike said with a smirk, "Now that is a totally different story and not about what you are researching about here today." Mike, laughingly, said:

> Honestly, I would rather been seen [treated] by a veterinarian then some of them shop docs. You see an animal cannot talk and tell you what is bothering them. But a veterinarian will go in there … examine them, treat them, and they [the animal] get better! We can talk, but these shop docs don't care about you, they don't listen … there is no compassion there. See, you have to have patience with your patients.

Wayne reported that quality changes that affect him include activities of daily living. "I am feeling a little better now, but I am concerned for [my] future. I even changed my job [description] after I came back to work because of getting hurt before."

Wayne vented:

> After a couple of weeks [post-injury], I could not even get out of bed and there was no way I could think about jumping into the shower. My legs still go numb sometimes and sometimes I can't walk. At one time I thought I was going to be paralyzed. One time, I even had to call my dad to come and get me out of the shower.… That was embarrassing; I am a grown man.

Clayton, sincerely, said:

> You want to be able to take care of your family and do things. You don't want to feel trapped in the world [so] that somebody else has to take care of you and do things for you. I do [currently] have numbness and cramps that go into my leg. There is nerve damage that happened because of the surgery. But they warned me about that going into the surgery. I can't play like a kid anymore … but I like to think that I could.

Lynn simply described, "I could not hold a job any longer. Then, at one point, I was swinging a four-pound sledge [hammer] on a different job. Now my elbows and wrist are worn out too."

System Transformations

Marvin submitted that the current workers' compensation is broken and in need of repair:

> I think that if you are really hurt at work … well in the case of [my employer] and through my years of experience … if you get hurt they are just going to send you up and put ice on the area and in 20 minutes you will be sent back to work and do the exact same thing that you were doing previously. I have had a lot of plant experience; I have been there a long time. Now some people have been there less or may even be on a temporary status. They really get frowned upon to leave work … even for a half hour.
>
> > Now why would that person that is trying to make a good impression on his supervisor want to go up to medical just to have ice placed on them for 20 minutes? On the other hand, that boss cannot afford to lose a worker for a half hour. So what I say is that I try to be more lenient on my employees when they get hurt. I think that if you are really hurt you should be able to go and see your own doctor. And let your doctor

> determine that you need an MRI or whatever. You should not have to wait until their [work comp] system or rules apply. Because if you are really hurting … you are not going to wait around and see what work is going to do … you are just going to get into your car and go to the nearest Emergency Room. But if you are hurting that bad … why can't you just go to the Emergency Room or see your own doctor? Is it really going to mess up the system that much? I think that if you are hurt that bad you should be able to go see anyone and just let the paperwork catch up there. I personally think that the [injured] worker would appreciate the extra concern … just don't blow it off and put ice on it and send them back to work.

Jimmy, seemingly, agreed:

Like I said, I have been around the shop for 34 years and I have been hurt quite a few times. I think what I would like to see is to get rid of the shop doc and let us go where we want to be seen. I mean there would have to be some kind of checks and balances, but I think harassing, and that is what it feels like, to me just because I cut myself or something else happened. Like I am sure that is why you are looking at back injuries … there just has to be a better way than the current system. There should be like a neutral party to help with this type of stuff. Because until the shop doctors quit *working for the company* [emphasis added] or looking out for their own good, the system will not be fixed.

Wayne conceded that he would like to see the system fixed as well:

Probably the first thing I would change about the system … is the way that everything is automatic. It doesn't matter what happened or what happened to whomever … it ain't their [the employer's] fault. They act as if it is not their fault if it happens at work … or even inside their building. That is why most people give up on Worker's Comp: they don't want the hassle. They [the employer] just want to drag it out and drag it out. That is one thing that I would change. I would say put a timetable on it or something like that.

Bill, energetically, pronounced:

The biggest problem is the staff. And the staff is understaffed. They can't seem to manage the cases they currently have. I would also like to see the physical therapy staff and the doctors comp people on the same sheet of music. I really think that this is where the problem is. See, I will have a physical therapist tell me one thing … then the comp doc will refuse their recommendations. I think that they need to have better communications. My surgeon personally told me that I would be his last Worker's Compensation case … they [the insurers] are just too worky and not worth the hassle any longer. The bottom line for me is that

> I would really try and help the [injured] worker to get back up on their feet … but not hassle them at the same time.

Mike also relays that he thinks a "tandem approach" would be most beneficial. He also endorses "more communications between the concerned parties." He would even like to have an "electronic medical record or video conferencing to be used so that all the different providers could see what the other was doing, ordering, etc." Mike also thinks that it is very important to ensure that all providers are all receiving updated training in relation to current studies. "They all could use a course in *compassionate care* [emphasis added]." Mike remarked, "I always felt that shop doctors worked where they did because they could not get any other kind of job … like in a regular hospital or clinic. So I would want to change that atmosphere too." Mike added, "I would just like to see a more compassionate system … um, you know, more tolerant with work issues."

David proclaimed that he thought the problem ran a lot deeper than what appeared on the surface. David remarked, "It is a culture that lives around. If you want to change the Worker's Compensation system you are going to have to change the culture of the workers around here."

John thinks, "I would personally change the way that they make you go to see *their doctor* [emphasis added]":

> Because their doctor will say that there is nothing wrong with you and you can go straight back to work. And that is where the problems start. They have their doctor saying one thing and another doctor saying something totally different. I would like to see them use an uninterested third party to help mediate the differences, someone who is not working for the employer or the insurance company. You know, somebody that is not vested in the fight, [but] someone that will look at your stuff and give you an honest answer.

Clayton remarked:

> I talk to people at work all the time now, especially the new ones. I tell them to make sure that they document every kind of injury that they have in the shop. They need to know where, when, and why. That can do nothing but help them over time, if they have good documentation, I mean. I then tell them to make sure that they report it [the injury] to medical and get it official … right away.
>
> Most of the injuries in the workforce today are cumulative over the years and I believe that everybody throughout the years should secure the responsibility. If it were up to me I would not burden the employers with the work comp system.

Lynn agreed on a similar platform too:

> I would start to train them when they hire in … you know as part of their in-processing training. I would give them a pamphlet that outlines the truths and the myths about worker's comp and probably more important where to go for straight answer about a work injury. I would like them to change the system so that it [an injury] could be addressed when it begins … and do it in a direct manner. So many people here in the shop think that they *know* [emphasis added] about comp, but they don't; they are just like jailhouse lawyers. No matter what changes [comp laws], people are going to try and play the system … it is human nature.

Conclusion

Chapter 4 has provided a summary of the data collection and data analysis process of the ten participants who were injured at their worksite. The experiences of each injured worker were explored using a phenomenological approach. The injured workers described their experiences with workers' compensation in an unstructured, audiotaped interview. The interviews lasted between 40 minutes and 1 hour. Details of the shared experiences as they related to occupational related injuries and care were provided in this chapter. Chapter 5 contains the results, recommendations, and conclusions.

CHAPTER 5. RESULTS, CONCLUSIONS, AND RECOMENDATIONS

The purpose of this qualitative study was to explore the meaning and essence of aging automobile assembly workers and their lived experiences of occupational-related lower back injuries. Chapter 4 contained the results of the study. Three themes emerged from the data, which were discussed and presented in the previous chapter. The findings of the study are significant, as healthcare delivery is a salient focus amongst all healthcare providers, not just occupational healthcare providers. In addition, these findings are significant for insurers and the employers alike.

This study contributes to the knowledge base by exploring what the types of attitudes, behaviors, and self-motivators are exhibited by older automobile assemblage workers after injuring their lower backs at the worksite. The goal of this chapter is to discuss and evaluate the results of the study in order to produce proper conclusions and recommendations.

Limitations of the Study

There are numerous limitations in the study. Most notably is the size of the sample. For the study to be generalizable to a larger population, it would need to have a larger sample, population diversity, and injury diversity.

The second limitation of the study is the age and experience level of the injured workers. All of the participants in the study had many years of experience on the job. A younger population may elicit a much different theme analysis from data.

The third limitation is that the study may be skewed by the inability to know if the participants are being truthful in their answers during their interviews. Prior to the

conduction of the interviews, numerous participants voiced that this research project might somehow be helpful to their employers.

Lastly, the OM clinic at which the employees were treated was located on-site, within the employer's company. Therefore, the results of the study may be skewed due to the participants' ages and levels of experience and the physical locale of the occupational medical clinic.

Results and Discussion of Findings

Summary of Findings

The researcher explored the lived experiences of older, automobile assembly workers, who had injured their lower backs at work. As reported by Moustakas (1994), phenomenological studies are those in which the researcher refrains from making presumptions, centers on a specific topic newly and naively, creates a question or problem to guide the study, and originates findings that will provide the underpinning for further research and thought. The ten participants each shared their experiences about the phenomenon throughout the interview process. The participants expressed their perceptions and personal feelings about how it felt to be injured at a worksite and then treated at an occupational medical clinic. The researcher gained data through direct, face-to-face interviews with the participants as they shared their stories.

The qualitative phenomenological construct allowed detailed exploration of the participants' personal lived experiences and how they qualified or made sense of their experiences (Smith, 2004). The construct allowed for a deeper, richer, more in-depth understanding of the phenomena being investigated. The intent of this study was to

understand the situational experiences and meaning as seen through the eyes of the participants (Giorgi, 2002).

Interviews were audiotaped and the researcher took field notes to enhance the data triangulation. Data were then manually coded. Additionally the qualitative software HyperRESEARCH™ version 3.5 was also utilized. Extrapolated data were then used to form meanings and themes. The meanings and themes were then compared, contrasted, and examined for linkage related to the study under investigation.

Interpretation of Key Findings

The conclusions are based on the literature as reviewed in the previous chapters. Three themes emerged from the analysis of data from the ten participants in the study. Each of the themes were discussed and presented in the previous chapter. In this section, analytic conclusions are made based upon the aforementioned themes.

Lack of empathetic care. Previous research (Binder, 1999; Henry, 1999; Knight, 2001) has revealed that classroom instruction alone is not sufficient to produce empathetic care. Factors that tend to affect injured workers returning to work include local economic conditions, employer attitudes, job satisfaction, and individualized personal characteristics (Williams & Myers, 1998). Self-interpretation of recovery from a work-related back injury is underscored by multiple factors (Williams & Myers, 1998). Restricted work activities can expedite an injured worker's recovery status; however, the ability of an injured worker to return to the worksite is not the sole measure of full recovery (Nguyen & Randolph, 2007).

Communication between the injured worker, employer, healthcare provider, and insurer is essential to help avoid adversarial outcomes. Empathetic and compassionate care is an essential component of effective communication skills, is "intrinsically therapeutic," and helps to reestablish a feeling of connectedness with patients (Suchman et al., 1997, p. 678).

The findings from this research suggest that injured workers do not feel that they receive the same empathetic care from an occupational clinic setting at the worksite as they do with their personal healthcare provider outside of the worksite. Additionally, participants' described their personal experiences with occupational-related lower back injuries as a negative experience. The ability for the patient to choose a provider allows for a better continuity of care and instills a stronger provider-patient trust relationship (Thom et al., 2004). The findings of the research indicate evidence for a lack of organizational trustworthiness amongst injured workers, the occupational providers, employer, and the insurers.

Return to work motivators. The longer an injured worker is away from work, the greater the risks for the injured worker not to return to the workforce (Nguyen & Randolph, 2007). Individualized determinates embody self-management behaviors. Attitudes represent positive and negative evaluations of performing specific behaviors (Ajzen, 1991). Injured workers have individualized, motivating behaviors that highlight return-to-work decisions.

Based on the responses of the participants, monetary motivations overwhelmed self-management behaviors. Whether legitimately injured or not, injured workers sought

to gain workers' compensation benefits and the associated monetary benefits. Once gained, these monetary incentives through the workers' compensation system were lucrative driving forces that an individual sought to sustain.

These findings suggest the research participants are more willing to exert additional effort to perform a particular behavior if they have a feeling of control. This suggestion is in alignment with previous studies of perceived controlled behaviors.

Transformable processes. Residual psychosocial features persist after work-related lower back injuries. Noteworthy findings of the research include the presence of depression, anxiety, substance addictions, and changes in activities of daily living. Most research participants experienced a personal transformation due to their work-related injury. These findings are consistent with previous research, which stresses a plethora of causative factors of lower back injuries (Ghaffari et al. 2006; Keel et al., 1998; Kerr et al., 2001).

Recent systematic changes, through legislative processes, have recently been implemented in workers' compensation in the state of Michigan (Michigan Workers' Compensation Agency, 2011). These changes include an updated definition of disability, post-injury earning capacity, and personal injury. Other changes include premium cost reductions for workers' compensation insurance for the employers, projected at an average of 8.3% in 2014. These changes will help to stabilize the 100-year-old system, ensuring the promise of fair compensation for injured Michigan employees. These changes are consistent with the research participants' acknowledgement that the current system is in disrepair.

Implications and Recommendations

Previous research in regards to empathetic care within the occupational medicine setting is very limited. Ajzen (1991), concluded an optimal prediction of behavior can be obtained from an individual's intent, which in itself is a good indicator of how hard an individual is willing to try and how much effort he or she is willing to exert. The TpB framework allowed the researcher to examine the beliefs and attitudes of the injured worker.

First and most importantly, this research revealed empathy in itself is not an innate trait that is shared amongst healthcare providers. Individuals who are injured as a direct result of their employment and/or suffer from illnesses resulting from their employment are entitled to proper treatment and care. Occupational providers have a responsibility to the injured worker. The participants treated in this study did not feel that their occupational clinic experiences put forth the type of empathetic care that they received from their personal providers. Occupational providers cannot be calloused in treatment as a result of their patients being injured at work. If they are, a vicious cycle may be created that is self-repeating and infectious in nature. It is prudent for the occupational medicine provider to make full use of all obtainable stratagems, in order to ensure a complete empathetic relationship exist with the injured worker. This said being truly an empathetic occupational health care provider is personally challenging and is burdened with difficulties.

The Institute of Medicine (2001) highlighted an existence of a health care quality chasm "between the health care we have and the care we could have" (p. 1). As

demonstrated through this qualitative study *the existence of an empathetic chasm in occupational medicine* [emphasis added] is present in 2014. Further studies are needed to develop a means to improve empathetic care training and awareness in occupational training programs. As a means to help eclipse this type of finding this researcher recommends the following: Academic occupational medicine programs should explore the expansion of their respective curriculums to ensure students are exposed to the empathetic underpinnings of patient care. In comparison, psychologist, psychiatrists, and social workers are trained in the art of empathetic care, active listening and role-playing.

Second, employers that fall under the auspice of workers' compensation claims are responsible not only to bear the cost of the workers' compensation injury/illness, but also to refrain from underreporting injuries to avoid higher insurance premiums. Underreporting may create a work environment with a dearth of trust and loyalty between the employers and employees. Workers' compensation insurance provides critical protection to both the worker and their employers (Edmiston, 2006). Occupational health surveillance is key for effective mediations. However, the United States lacks by not having a comprehensive national surveillance system for occupational injuries which results in injuries being underreported estimated as high as several hundred percent (Azaroff, Levenstein, & Wegman, 2002). This research has suggested underreporting in the workers' compensation arena is present in order to avoid higher insurance premiums. Premium fraud abusers present an improper competitive advantage to law-abiding employers. Further studies are needed to explore this phenomenon.

Third, insurers should endorse early, open communication with the injured worker, the employer, and the treating provider. Insurers who avoid such open communication may be seen as an obstructionist to the treatment plans recommended by occupational medical providers as a way to discourage injured workers from receiving ancillary testing and/or treatment modalities. Delaying these types of open communications may create insurmountable angst amongst the injured workers, the occupational healthcare providers, and the employers. Insurers should also ensure that injured workers receive accurate information about their entitlements and benefits. Further studies are needed to explore how improved relationships between the injured worker, employer, occupational provider, and insurers impact the overall cost of injury care.

Last, injured workers should not embellish injuries as a means to secure dishonest means of income. The cost of workers' compensation claims in Michigan accounts for approximately 1.3 billion dollars annually (Michigan Workers' Compensation Agency, 2011). Doing so may create a rippling effect and be scrutinized further by employers, insurers, and occupational health providers. Ultimately this type of dishonesty would only harm future legitimately injured workers by impeding progression through the workers' compensation system. Further studies may assist employers reduce overall cost of workers' compensation injuries by gaining a better understanding of how they are perceived by their employees after an injury occurs.

Summary

This phenomenological study explored the lived experiences of older, automobile assembly workers who injured their lower backs during the course of their employment. Participants were recruited through passive purposive sampling. Ten participants were interviewed for the study. All participants were injured on the job in the state of Michigan, while working in the shop. All of the participants were then treated in an occupational medical clinic as directed by their employer at the time. Data were gathered face to face, through semi-structured open-ended interview questions. Three themes emerged from the data analysis: a lack of empathy, individualized motivations, and transformable processes.

Individualized experiences from occupational lower back injuries are as unique as each individual worker. Effective communication skills are essential in the healthcare arena. Injured worker's who experience quality communications appear to be more satisfied with the care received compared to those that don't. Additionally, these injured workers seem to make a more rapid recovery with fewer complications. Furthermore, these injured workers seem to adhere better to the recommended treatment plans. This is ever more important in the OM setting, as there are a multitude of stakeholders present.

Injured workers undoubtedly place a considerable value on the quality of their relationship with occupational care provider. In order to avoid adversarial outcomes, healthcare providers need to have patience with their patients. Occupational healthcare providers should recognize that it is pertinent to practice the art of medicine one patient at

a time. This research has identified that further investigations are clearly needed in order to discover further roles that empathetic care has in the occupational medicine setting.

Workers' compensation system in Michigan should operate on a model of workplace rehabilitation, whereas the injured worker returns to work at a medically appropriate time either performing their pre-injury role, or a new one that is gained through appropriate retraining/rehabilitation. Workplace injuries are difficult both for the injured worker and the employer. An injured worker may have sustained an injury that has caused them pain and suffering, inconvenienced, or interrupted their normal lives. Additionally, stress may be have been increased as the injured worker is concerned about their recovery and financial wellbeing. Employers' may have trepidations about managing their employee's partial or complete absence from the worksite, how to safeguard assignments are completed, and timeframes are reached, as well as having to record and monitor their injured employees progression/digression.

As a researcher, this occupational healthcare provider has discovered the meaning that simple empathetic, altruistic care can have for one's profession. If we as occupational health care providers are humble and we can make our patients feel that we are not a threat to them, we stand a much better chance of having our patients trust our medical advice. As an occupational healthcare provider, this researcher has discovered an overall meaning of his research: Occupational healthcare providers should recognize the fact that no patient is more important than the one seated currently before him/her.

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APPENDIX A. STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University's Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy: Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University's Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in

the Policy: Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including the Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

Learner name and date	Brian W. Hill 18 JUNE 2014
Mentor name and school	Mark Minelli, PhD, Capella University, SoPSL

APPENDIX B. A PATIENT'S PERSPECTIVE QUESTIONNAIRE

1. How old were you when you injured your lower back at your job?
2. Tell me about the kind of work you do there.
3. Tell me about your work-related lower back injury experience.
4. Did you receive any kind of medical care for this injury? If so, where?
5. Tell me about your experience with the medical care you received.
6. How did you feel after being injured at your job?
7. Would you rather have seen your own personal medical provider for your injury care? If so, why?
8. How long were you injured and are you back to work now?
9. Did this injury affect you financially? How so?
10. What, if anything, motivated you to go back to work?
11. Has this work-related injury experience changed you in any way? If so, how?
12. Knowing what you know now, and if you could, what, if anything, would you change about Michigan's worker compensation system?