

**The influence of job satisfaction on  
supply chain performance in a selected  
South African motor vehicle manufacturer**

**W Kleynhans**

12517755

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**Supervisor:** Dr H Lotz

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## **ABSTRACT**

The study investigates the relationship between job satisfaction and supply chain performance. This relationship is investigated in the context of the automotive industry on a selected group in the South African region. Several factors are suggested and tested with empirical data derived from data collected from car dealerships in the Northern Cape, Free State and North West provinces. The data analysis identifies the most important factors influencing job satisfaction and determine if the performance measures in this study has a relationship. The results suggest that the factors had satisfactorily explained job satisfaction and that the managers should focus on the factors that affect job satisfaction, if they want to enhance their businesses. Based on the results for the standardized values, we are able to see that workplace conditions, nature of work, promotion, employee competency, supervisor communication and supervisor personal support are key factors affecting employees in the car dealerships. The factor of work conditions is proven to have significant influence. The work conditions the employee relationships and nature of work, all relate to job satisfaction.

**Key words:** job satisfaction, supply chain performance, car dealerships.

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## **1 CHAPTER 1 - INTRODUCTION**

According to Naude (2011:1) the automotive industry is often described as one of the most global of all industries and that its products are spread around the world and are dominated by a small number of large companies with global recognition. The South African automotive industry experiences increasing operational complexities, rising fuel prices and higher human resources costs. This is a result of higher living costs and growing pressure from China and India to remain competitive. This has led to the industry's growing awareness of the impact of an efficient supply chain on business sustainability. The improvement of the performance of South African automotive supply chains is therefore of the utmost importance.

The importance of employee attitudes, such as job satisfaction and the impact on operational performance, supply chain, have largely been neglected in the operations management literature (Boudreau, 2004:1). Job satisfaction, a worker's sense of achievement and success, is generally perceived to be directly linked to productivity as well as to personal wellbeing. Job satisfaction implies doing a job one enjoys, doing it well, and being suitably rewarded for one's efforts. Job satisfaction further implies enthusiasm and happiness with one's work. For the organisation, job satisfaction of its workers means a work force that is motivated and committed to high quality performance. Increased productivity, the quantity and quality of output per hour worked seems to be a by-product of improved quality of working life. It is important to note that the literature on the relationship between job satisfaction and productivity is neither conclusive nor consistent. Probably the most important point to bear in mind when considering job satisfaction is that there are many factors that affect job satisfaction and that what makes workers happy with their jobs varies from one worker to another and from day to day. Apart from the factors mentioned above, job satisfaction is also influenced by the employee's personal characteristics, the manager's personal characteristics and management style, and the nature of the work itself. Managers who want to maintain a high level of job satisfaction in the work force must try to understand the needs of each member of the work force. For example, when creating work teams, managers can enhance worker satisfaction by placing people with similar backgrounds, experiences, or needs in the same workgroup (Anon, 2011:1).

Supply Chain performance is a critical element to international competitiveness and an area of immense opportunity to make gains by reducing costs and optimising efficiencies. Focused programmes and sustainable initiatives are imperative in order to support this sector (Anon, 2010a).

Considering that local production is destined predominantly for international markets, there is no option but to ensure that supply chains are robust and in conformance to global best practices (Anon, 2010b).

## **1.1 PURPOSE OF THE STUDY**

The purpose of the research is to determine the main factors affecting job satisfaction in a South African motor industry and how the supply chain performance will be affected by it.

## **1.2 PROBLEM STATEMENT AND RESEARCH QUESTION**

### **1.2.1 *Main problem***

Job satisfaction can have an effect on the supply chain performance in a South African motor industry.

Dissatisfied employees create many problems for their organisation in spite of solving its problems (Ali, 2006:1). For instance, they may not want to teach in a way that is understandable to new employees or they may dawdle away most time in immoral discussion or they may not motivate them or they may come to work late and leave the work earlier.

Researchers have rightly observed that dissatisfied employees in the organisation may involve in counterproductive activities such as theft, poor service, destructive rumours and sabotage of equipment (Ali, 2006:2). These factors could all have a negative impact on the performance of the supply chain.

It also has been found that when employees are not satisfied, they report physical disturbances such as tension, depression, lassitude, apprehension and sleeplessness. If

the factors, with which the employees are not satisfied, are not identified, they give rise to severe problems for the organisation (Ali, 2006:2).

### **1.2.2 Sub-problems**

The first sub-problem is what factors influence job satisfaction in a South African motor industry.

The second sub-problem is which factors of the abovementioned will influence the performance of the supply chain in a South African motor industry.

Supply chain performance and practices have been found to be different among companies with different supply chain characteristics (Tippayawong et al., 2010: 25). Findings were reported that supply chain performance and practices may be influenced by firm characteristics, that one operational practise could not fit all supply chain characteristics (Tippayawong et al., 2010:25).

## **1.3 OBJECTIVES**

### **1.3.1 Primary objective**

Determining the main factors influencing job satisfaction in a South African motor industry focusing on the dealerships.

### **1.3.2 Secondary objective**

To determine if there is a relation between job satisfaction and performance of supply chain and how it affects the performance of the supply chain.

## **1.4 RESEARCH METHODOLOGY**

The main objective of this study is concerned with job satisfaction and supply chain performance within a South African motor dealership company situated in South Africa. From the identification of the broad objective of this research, a specific hypothesis was developed. The hypothesis, as described in the next paragraph, is basically

concerned with the relationship of supply chain performance and the level of job satisfaction within the organisation.

This hypothesis is tested within a motor company based in South Africa. The result of the research could show how improved job satisfaction could improve the performance of the supply chain within the motor industry.

The hypothesis for this research is as follows:

**H0: No statistically significant relationship exists between job satisfaction and supply chain performance in a motor industry.**

**Ha: A statistically significant relationship exists between job satisfaction and supply chain performance in a motor industry.**

## **1.5 RESEARCH DESIGN**

The plan in which information is collected from the research participants is called the research design (Welman & Kruger, 2004:46). A survey was done to collect the relevant information. Random employees were selected to keep sample workable and practical. The purpose of the study was described in a letter together with a questionnaire packet. This was personally delivered and collected to and from each staff member by the researcher. Thereafter the researcher administered the survey. The structured questionnaires assisted to determine areas of improvement in terms of job satisfaction.

The most common way of measurement is the use of rating scales where employees report their reactions to their jobs. Questions relate to rate of pay, work responsibilities, variety of tasks, promotional opportunities, the work itself and co-workers.

## **1.6 POPULATION AND SAMPLE**

A sample can be described as a subset or part of a larger population. The aim of sampling is to estimate unknown facts of the population (Zikmund, 2003:369-370). Random employees in each department of the company's dealerships (Sales department, Finance department, parts department and workshop) part of the supply

chain will be targeted to get the relevant information for this research. Some 80 questionnaires were handed out.

## **1.7 THE RESEARCH INSTRUMENT**

According to Leedy (1997:191), a questionnaire is referred to as an instrument used for observing data beyond the reach of the observer or researcher.

### **1.7.1 *Job Satisfaction Questionnaire***

To identify those aspects of your current job that are rewarding as well as those that contribute to dissatisfaction. For the purpose of the research, the questionnaire will be used to measure the dimensions such as pay, promotion, work relationships, work activities, working conditions, skills and abilities.

These items will be measured on a four-point Likert scale, with scale responses varying from:

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

### **1.7.2 *Questionnaire to determine the performance of the supply chain***

A questionnaire was used to determine those aspects of your current job that a typical supply chain may involve. These supply chain stages include:

- Customers
- Retailers
- Wholesalers/Distributors
- Manufacturers
- Component/Raw material suppliers

Each stage need not be presented in a supply chain. The appropriate design of the supply chain will depend on both the customer's needs and the roles of the stages involved.

### **1.8 Procedure for data collection**

Data includes facts collected from participants or observations, published information which is categorized as primary and secondary (Cooper & Schindler, 2001:82).

### **1.9 Data analysis and interpretation**

This refers to the application of logic and reason to refine collected data (Zikmund, 2003:374-375). Regression analysis will be used to see if there is a coloration and descriptive statistics to see the main factors of influence. To see where job satisfaction is low, that supply chain performance is at more or less the same level.

### **1.10 Validity and reliability**

Validity indicates the extent to which an instrument measures the construct that it is aiming to measure (Goodwin, 1995:96).

Reliability is defined as the accuracy or precision of an instrument. Reliability is also the extent to which the independent administration of the instrument will yield a similar or the same results under comparable situations (De Vos et al., 2001:85).

A reminder on questionnaires was put in place as well as using the appropriate statistical methods to ensure validity and reliability.

## **2 CHAPTER 2 – LITERATURE STUDY**

The concept of job satisfaction is of great interest to managers because they recognise the importance of a job in the total life experience of an individual. Job satisfaction is a general or global affective reaction that individuals hold about their job. While researchers and practitioners most often measure global job satisfaction, there is also interest in measuring different "facets" or "dimensions" of satisfaction. Examination of these facet conditions is often useful for a more careful examination of employee satisfaction with critical job factors. Traditional job satisfaction facets include: co-workers, pay, job conditions, supervision, nature of the work and benefits.

### **2.1 DEFINITION OF JOB SATISFACTION**

A worker's sense of achievement and success is generally perceived to be directly linked to productivity as well as to personal wellbeing. Job satisfaction implies doing a job one enjoys, doing it well, and being suitably rewarded for one's efforts. Job satisfaction further implies enthusiasm and happiness with one's work. Job satisfaction is the keying radiant that leads to recognition, income, promotion, and the achievement of other goals that lead to a general feeling of fulfillment (Gui, 2012:1).

According to Kaliski (2007, cited in Aziri, 2011:77) job satisfaction implies enthusiasm and happiness with one's work. Job satisfaction is the key ingredient that leads to recognition, income, promotion, and the achievement of other goals that lead to a feeling of fulfillment. The happier people are within their job, the more satisfied they are said to be. Job satisfaction is a very important attribute which is frequently measured by organisations.

Job satisfaction can be defined also as the extent to which a worker is content with the rewards he or she gets out of his or her job, particularly in terms of intrinsic motivation Statt (2004, cited in Aziri, 2011: 77). Amstrong (2006, cited in Aziri, 2011:77) argued that the term job satisfaction refers to the attitude and feelings people have about their work. Positive and favourable attitudes towards the job indicate job satisfaction. Negative and unfavourable attitudes towards the job indicate job dissatisfaction. Job satisfaction is the collection of feeling and beliefs that people have about their current job. People's levels

of degrees of job satisfaction can range from extreme satisfaction to extreme dissatisfaction, in addition to having attitudes about their jobs as a whole. People also can have attitudes about various aspects of their jobs such as the kind of work they do their co-workers, supervisors or subordinates and their pay George et al. (2008, cited in Aziri, 2011:77).

Job satisfaction is a complex and multifaceted concept which can mean different things to different people. Job satisfaction is usually linked with motivation, but the nature of this relationship is not clear. Satisfaction is not the same as motivation. According to Mullins (2005, cited in Aziri, 2011: 78) job satisfaction is more of an attitude, an internal state. It could, for example, be associated with a personal feeling of achievement, either quantitative or qualitative. These authors consider that job satisfaction represents a feeling that appears as a result of the perception that the job enables the material and psychological needs.

Job satisfaction can be considered as one of the main factors when it comes to efficiency and effectiveness of business organizations. When analysing job satisfaction the logic that a satisfied employee is a happy employee and a happy employee is a successful employee. The importance of job satisfaction specially emerges to surface if one keep in mind the many negative consequences of job dissatisfaction such a lack of loyalty, increased absenteeism, and the increased number of accidents (Aziri 2011:78).

Spector (1997, cited in Aziri 2011: 78) lists three important features of job satisfaction. First, organizations should be guided by human values. Such organizations will be oriented towards treating workers fairly and with respect. In such cases the assessment of job satisfaction may serve as a good indicator of employee effectiveness. High levels of job satisfaction may be a sign of a good emotional and mental state of employees. Second, the behaviour of workers depending on their level of job satisfaction will affect the functioning and activities of the organization's business. From this it can be concluded that job satisfaction will result in positive behaviour and vice versa, dissatisfaction from the work will result in negative behaviour of employees. Third, job satisfaction may serve as indicators of organizational activities. Through job satisfaction evaluation different levels of satisfaction in different organizational units can be defined,

but in turn can serve as a good indication regarding in which organizational unit changes that would boost performance should be made.

## **2.2 Factors of Job satisfaction**

Job satisfaction is under the influence of a series of factors such as: The nature of work, Salary, Advancement Opportunities, Management, Work groups and Work conditions. When talking about factors of job satisfaction the fact that they can also cause job dissatisfaction must be kept in mind. In fact the main idea is that employees in their work environment are under the influence of factors that cause job satisfaction and factors that cause job dissatisfaction. The level of salary, promotion, appraisal system, climate management, and relation with co-workers are the vital factors. (Lambert et al., 2001, cited in Khan et al., 2011: 2689).

### ***2.2.1 Impact of rewards/pay on job satisfaction and performance***

Frye (2004, cited in Khan et al., 2011: 2698) found that there is positive relationship between equity based compensation and performance. It was further concluded that compensation plays vital role in human capital intensive firms to attract and retain expert workforce. There are some empirical evidences that there is positive correlation between compensation and performance (Tessema and Soeters, 2006, cited in Khan et al., 2011: 2698).

### ***2.2.2 Impact of promotion on job satisfaction and employee performance***

Nguyen et al. (2003, cited in Khan et al., 2011: 2698) concluded that job satisfaction is the result of promotion opportunities in the organization. If organizations want to accelerate performance of employees in the organization, fair promotional opportunities should be given to employees (Park et al., 2003, cited in Khan et al., 2011: 2698).

### ***2.2.3 Impact of job safety and security on job satisfaction and performance***

Various researcher conducted studies and found that job dissatisfaction is the outcome of insecurity among employees (Davy et al., 1991, cited in Khan et al., 2011:2698).

Important factors like low job security, working conditions and the nature of work, low wages and lack of promotion, low job autonomy have adverse effect on the level of job satisfaction of employees (Silla et al., 2005, cited in Khan et al., 2011:2698).

#### ***2.2.4 Impact of working conditions on job satisfaction and performance***

Spector (2008) (as cited in Khan et al., 2011:2699), states that the work environment is an important determinant of job satisfaction of employees. The work environment, in new research concluded by the scholars Silla et al. (2005, cited in Khan et al., 2011: 2699), was found to be a better determinant of job satisfaction and that the working conditions have effect on the satisfaction of employees. These include comfortable proper work and office spaces, temperature, lighting, and ventilation.

#### ***2.2.5 Impact of relationship with co-workers on job satisfaction and performance***

James (1996, cited in Khan et al., 2011: 2699) concluded that the working as a team has significant impact on the satisfaction level of employees as it affects their performance. It is essential to recognize to the significance of these factors to boost the satisfaction level in the workforce.

#### ***2.2.6 Impact of relationship with supervisors on job satisfaction and performance***

Brunetto et al. (2002, cited in Khan et al., 2011: 2699) concluded that supervision of the immediate manager increases the level of job satisfaction in the public sector employees. The productivity and performance of subordinates can be improved with managerial actions and supervision. The recognition of the achievements by the supervisors leads toward job satisfaction and is useful to solve the problems (Yen, 1992, cited in Khan et al., 2011:2699). Okpara (2004, cited in Khan et al., 2011:2669) found that job satisfaction among managers can be increased with the help of supervision. It was further found that job satisfaction is not the result of satisfaction with supervisors (Roelen et al., 2008, cited in Khan et al., 2011:2699). The recognition of the subordinate attainment by the supervisors enhances their job satisfaction level are also useful for solving the day to day

problems. The productivity and performance of the subordinates is significant toward the managerial actions and supervision of the workers Yen et al. (1992, cited in Khan et al., 2011: 2700).

### **2.2.7 *Impact of nature of work on job satisfaction and performance***

Ting (1997, cited in Khan et al., 2011: 2700) studied that the work itself has positively correlated with the satisfaction of employee. Robbins et al. (2003, cited in Khan et al., 2011: 2700) refer to the work itself as “the extent to which the job provides the individual with stimulating tasks, opportunities for learning and personal growth, and the chance to be responsible and accountable for results”.

## **2.3 WHAT IS A SUPPLY CHAIN?**

A supply chain consists of all parties involved, directly or indirectly, in fulfilling a customer request. The supply chain not only includes the manufacturer and suppliers, but also transporters, warehouses, retailers, and customers themselves. Within each organization, such as manufacturer, the supply chain includes all functions involved in receiving and filling a customer request. These functions include, but are not limited to, new product development, marketing, operations, distribution, finance, and customer service. Consider a customer walking into a motor dealership to purchase a vehicle. The supply chain begins with the customer and their need for a vehicle. Motor dealerships stock its showroom using inventory that may have been supplied from a finished-goods warehouse or from a distributor using trucks supplied by a third party. The distributor in turn is stocked by the manufacturer. A supply chain is dynamic and involves the constant flow of information, product, and funds between different stages. The term supply chain may also imply that only one player is involved at each stage. In reality, a manufacturer may receive material from several suppliers and then supply several distributors. Thus, most supply chains are, in essence, actually networks. It may be more accurate to use the term supply network or supply web to describe the structure of most supply chains (Chopra & Meidl, 2004:1).

A typical supply chain may involve a variety of stages. These supply chain stages include:

- Customers;
- Retailers;
- Wholesalers/Distributors;
- Manufacturers; and
- Component/Raw material suppliers.

Each stage needs not to be presented in a supply chain. The appropriate design of the supply chain will depend on both the customer's needs and the roles of the stages involved.

## **2.4 SUPPLY CHAIN OVERVIEW OF THE MOTOR COMPANY BEING STUDIED**

The supply chain has both physical components as well as operational and planning processes.

### **2.4.1 *Physical Flows***

Parts are produced by suppliers and transported by inbound logistics to the assembly plant. At the assembly plant, the vehicle begins in the body shop, moves to the paint shop, then to assembly, and finally to inspection. Once the vehicle is produced, it is transported to the dealerships via outbound logistics.

### **2.4.2 *Suppliers***

Suppliers provide thousands of parts and components that go into the vehicle. These parts and components are received via the inbound logistics network from hundreds of tier 1 suppliers. Tier 1 consists of the first-level suppliers that make parts and ship directly to the assembly plants. Because suppliers also have suppliers, and those suppliers have suppliers, the supply chain contains several levels that are referred to as tier 1, tier 2, tier 3, and so forth. So you can imagine how complex the inbound supply chain is for an automobile assembly plant. In addition, because suppliers are located in various geographic areas, the time for parts to arrive from each supplier to the assembly plant, can vary greatly. Local suppliers may be only one or two days away from the

assembly plant, whereas suppliers located overseas may require several weeks of transportation time.

### **2.4.3 Inbound Logistics**

The motor company success in operating a lean supply chain requires that the parts be transported from the suppliers in an efficient and timely matter; therefore, the company establishes a partnership with a limited number of third-party logistics providers (3PLs) to deliver logistics services. The company's inbound logistics operation can best be described as a logistics network. The company organizes many of its suppliers into clusters based on geographic location. Parts are picked up from those suppliers by trucks on a milk route (such as a circuit in which a truck picks up multiple parts from various suppliers along the way), and then they are delivered to a regional cross dock. (Suppliers that are located close to the plants, however, ship parts direct.) The company takes complete responsibility for pickup and transportation of parts from the suppliers to the plants, because the company's just-in time parts inventory practice requires extreme reliability of inbound logistics. Toyota organizes the suppliers into clusters based on geographic proximity. The truck routes are designed for parts to be picked up from multiple suppliers and delivered to a regional cross-dock. To improve efficiency, the same truck will pick up parts not only from multiple suppliers but also from each supplier destined for different Toyota plants. Once trucks arrive at the cross-dock, the parts are unloaded and staged for each assembly plant. They are then loaded onto trucks that take parts directly to each plant. Trucks are unloaded at the plant based on the progress of production. If the plant is operating on schedule, the trucks will wait only a few hours in the plant yard. After the parts are unloaded, the truck is reloaded with the corresponding empty returnable containers. These returnable containers flow in reverse through the cross-dock and back to the supplier to be reused for a future shipment.

The first step in network design is to analyze the location of the suppliers and identify clusters of them that are located in close proximity to one another. Next, a determination is made as to which cross-dock is located nearest to the suppliers. The idea behind this design is that one truck picks up parts from multiple suppliers in what is called a *milk route*. The truck then delivers the parts to the nearest cross-dock. The parts are

unloaded and the corresponding empty containers are picked up and returned to the suppliers on the next run. The parts are then staged for pickup by trucks that are scheduled to deliver full truckloads of parts directly to each plant.

#### **2.4.4 Production**

Vehicles are produced at the final assembly plant from the parts provided by hundreds of suppliers. A typical assembly plant will have one or more separate lines on which vehicles are assembled. The plant is subdivided into shops. The vehicle is born in the body shop where the frame and body are formed. The body parts are stamped in the stamping shop by presses. The body shop is where numerous robots are used to weld the body parts together. Once the body is assembled, then the vehicle moves to the paint shop and its exterior is painted. After the vehicle is painted, it moves down the line into final assembly. At that point most of the supplier-provided parts are installed to make a finished vehicle. Once the vehicle completes the final inspection, it is released from the factory for shipment to the dealer.

#### **2.4.5 Outbound Logistics**

Vehicles that are produced at an assembly plant must be transported to each dealer. This process is commonly referred to as outbound logistics. Just outside the assembly plant, there is a large yard that is used to stage the vehicles prior to shipment. At this company, these yards are referred to as marshaling yards. Team members install accessories, perform final quality assurance, and stage vehicles for shipment. Once the vehicle is ready for shipment, it is driven to either the railcar staging area or the truck staging area.

#### **2.4.6 Dealers**

Dealers play a key role in the supply chain because they are the face of the company to the customer. They are responsible for selling the vehicles produced by the manufacturer to the retail customers. In addition to selling vehicles, dealers have an extremely important influence on customer satisfaction. One of the key responsibilities of the

salesperson is to guide customer demand. Their sales model is designed so that a high percentage of vehicles are sold from a relatively low level of dealer stock.

#### **2.4.7 Parts Ordering**

There are many parts ordering processes for the different categories of parts. The four broad part categories are local parts, long lead time parts, in-house parts, and sequenced parts:

1. Local parts are parts supplied by suppliers located within the same global region as the assembly plants. Parts supplied by Japanese suppliers to North American and European assembly plants would be considered long lead time parts.
2. In-house parts, such as body panels, plastic bumpers, and engines, are produced at the same site as the assembly plant.
3. Sequenced parts are produced at suppliers located near to the assembly plant. Those parts are shipped to the assembly plant in the exact sequence of the vehicles being produced. A typical sequenced part for assembly is seats.

#### **2.4.8 Parts and Supplier Master Database**

A common process is to maintain a parts and supplier master database. The parts master contains information such as part name, supplier, lot size, and vendor share. Vendor share is used to allocate shares when a part is sourced to multiple suppliers.

#### **2.4.9 Forecasting**

Each week, a 13-week rolling forecast is sent to all suppliers to provide them with guidance for future orders. The forecast gives suppliers an estimate of future orders so that they in turn can send forecasts to their suppliers. In some cases, long lead time component parts or raw materials may need to be ordered as a result of the forecast.

After all of the necessary part quantities are determined for each vehicle for the three-month rolling production, they are summarized by part number, by supplier, and by

production week. Then the quantities are divided by the lot size to determine the number of lots to order for each part number for each supplier (Anon, 2012).

## **2.5 DEALERSHIPS**

According to (Ray, 2010:1) the following is the process of most dealerships:

### **2.5.1 Basics**

A car dealership is a private business owned by a single owner or group of investors. Most car dealerships carry a limited number of franchises to sell various makes of automobiles and trucks. A used lot is often attached to a car dealership where trade-ins and other purchased vehicles are sold. Various departments make up a car dealership, including the sales team, business administration, mechanics and finance department.

### **2.5.2 Franchise**

When a dealer buys a franchise, there are usually rules that come with the package--including how to decorate the showroom. Buildings, furniture and layout plans often come from the corporate office to provide an atmosphere that jells with the brand and is repeated in other locales. Manufacturers push lifestyle as part of their marketing campaigns and usually provide dealers with other items such as jackets, car mats and key chains to sell to customers.

### **2.5.3 Management**

The sales manager oversees the sales team and the ordering of new vehicles. Most car dealerships try to keep an inventory of about 2 months in stock. They must order a mix of styles and colours to appeal to the most customers and not make them wait for special orders. Sales managers can check the manufacturer's supply via a company intranet and place orders accordingly. Dealers must pay for the cars when they're delivered, not when they're sold, so the dealer carries a large financing package. The suggested retail price on a car includes an average of 3 per cent commission for the dealer. Wholesale rebates to the dealers are sometimes offered to help move sluggish inventory.

#### **2.5.4 Sales**

Sales people take turns greeting customers as they approach the showroom. Sales people often work their own leads through referrals, networking and personal advertising. Customers often go to a showroom armed with a salesperson's name. The first job of the salesperson is to explain the features and benefits of a vehicle and get the customer to drive the car or truck. Salespeople are trained by the manufacturer's representatives to understand all of the features on their vehicles. A salesperson has no authority to negotiate price, and is forced to go back and forth between the sales manager to ask permission to come to a final deal. A good car salesperson makes his/her clients feel as if they are fighting management to get the customer the best deal. Once an agreement is made, the salesperson walks the customer through the rest of the buying process.

#### **2.5.5 Finance**

The Finance and Insurance Department (F&I) takes an application for financing from the customer or accepts the payments that the customer has pre-arranged. F&I people have the duty to sell extended warranties and their own financing packages. The finance person often is encouraged to sell a loan through the manufacturer's finance company and must meet sales goals each month, just like the car salespeople.

#### **2.5.6 Service**

The service department accepts the new cars when they come off the trailer and prepares them for the lot and the showroom. The cars must be cleaned and prepped, plastic covers removed and striping applied. The service department also installs add-ons that the customer ordered. The service department can repair cars and perform regular maintenance functions. Many service departments also have a body shop and keep parts on hand to sell and use for repairs.

## **2.6 WHY ARE THE DEALERSHIPS IN THE SUPPLY CHAIN VERY IMPORTANT?**

Due to the complexity of the supply chain the study will only be focusing on the dealership part of the supply chain and how job satisfaction of the employees can influence the supply chain performance in the dealership department of the supply chain.

The allocation follows a “turn and earn” model where specific vehicles are allocated by region. One of the tasks of the dealer is to explain to customers the value proposition offered by the company. Most repeat customers who have owned cars earlier or are familiar with other manufacturers understand the concept that variety will be limited to maintain quality and value. The remaining customers require salesperson assistance to walk them through the value proposition of the increased features that accompany the limited variety, thus providing the “added value” for the cars offered. Dealers have a voice in a dealership’s product planning and their perceptions regarding customer needs were considered when allocations were made.

Every quarter, the sales managers in each region meet with dealers to decide which cars should be built. This process is guided by the company’s sales, so dealers may not get exactly what they want. However, dealers get to influence product configuration. Dealers get quick access to the highest levels at the company’s sales executives to provide feedback regarding customer preferences (Anon, 2010).

Vehicles continue to be allocated using the “turn-and-earn” model. The car is manufactured in Japan and shipped to the United States to the ports around the country nearest to the dealers. But the product is held at the port and then released to dealers against orders. The dealers have the choice of customizing the product at the port or at the dealership. Each customer is encouraged to customize his or her car through choice of decals, crests, and other accessories. The car and its accessories are presented to customers with fixed prices, so pricing is transparent with no negotiation. The customer waits for 7 to 10 days to get the car (Anon, 2010c:1).

Dealerships that are allocated cars have the option to decline to take possession, but that decision will affect future allocation preferences. The allocation is based on the

dealers' share of the region sales. Each line is allocated separately so that sales of one type of car do not affect allocations of another (Anon, 2010c).

The company's relationship with dealers is like a partnership. The National Dealer Council consists of 10 to 12 dealers. It provides a lot of input to the company regarding customer preferences. There are 1,200 dealership of the company across 12 regions that are represented by the dealer council (Anon, 2010c).

It was mentioned that the dealers adopt the company's approaches toward kaizen and expect to increase their productivity. Sales associates who provide ideas for improvement are rewarded individually. The goal is to decrease expenses without affecting the customer (Anon, 2010c).

### 3 CHAPTER 3 – EMPIRICAL STUDY AND RESULTS

#### 3.1 Introduction

The aims of existence of most companies are to develop and grow at the market and to maximise wealth for the shareholders/ owners. Each company is involved in longer or shorter supply chains. Most of these supply chains are multinational as the twentieth century was the age of globalisation and of crossing borders and cultures. During the process of creating these supply chains, each company had to decide what kind of supply chain it should be involved in and which supply chain would bring greater profits. Profit and wealth creation is the core criterion why investors choose among different possibilities of investing funds and money.

#### 3.2 Demographic Profile of Respondents

Section A of the survey questionnaire consisted of demographic information where respondents had to indicate their age group, gender, race, highest academic qualification and the functional division they work in.

*Table 3.1 Divisions in which respondents are working*

Divisions	Frequency	Percentage
Sales department	20	43%
Workshop	18	38%
Parts department	5	11%
Finance	4	9%
<b>Total</b>	<b>47</b>	<b>100%</b>

*Table 3.2 Gender of respondents*

Gender	Frequency	Percentage
Male	26	55%
Female	21	45%
<b>Total</b>	<b>47</b>	<b>100</b>

**Table 3.3 Management level of respondents**

Management level	Frequency	Percentage
Top management	10	21%
Middle management	24	51%
Lower management	13	28%
<b>Total</b>	<b>47</b>	<b>100%</b>

**Table 3.4 Highest academic qualifications level of respondents**

Qualification	Frequency	Percentage
Lower than matric	7	15%
Matric	31	66%
Diploma	8	17%
B.Degree	1	2%
<b>Total</b>	<b>47</b>	<b>100%</b>

### **3.2.1 Age group of respondents**

Purpose of question in section A (refer to annexure A) of the questionnaire was to determine the age group classifications of the respondents according to the five predetermined age groups. This data were also required to:

- Compare the differences in means between the demographic variable age and the Job satisfaction variables.
- Compare the differences in means between the demographic variable age and the Supply chain performance variables.

There were **no** significant correlations between the age of respondents and the factors of job satisfaction and supply chain performance.

### **3.2.2 Gender of the respondents**

Purpose of question in section A (refer to annexure A) of the questionnaire was to determine the age group classifications of the respondents according to the five predetermined age groups. This data were also required to:

- Compare the differences in means between the demographic variable gender and the Job satisfaction main variables.
- Compare the differences in means between the demographic variable a gender and the Supply chain performance main variables.

### **3.2.3 Divisions in which respondents are working**

Purpose of question in section A (refer to annexure A) of the questionnaire was to determine the age group classifications of the respondents according to the five predetermined age groups. This data were also required to:

- Compare the differences in means between the demographic variable Divisions and the Job satisfaction variables.
- Compare the differences in means between the demographic variable Divisions and the Supply chain performance variables.

### **3.2.4 Cronbach's Alpha Coefficient**

The Cronbach alpha coefficient was developed by Lee Cronbach in 1951 to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1 (Field, 2005:668). Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test. Internal consistency should be determined before a test can be employed for research or examination purposes to ensure validity. In addition, reliability estimates show the amount of measurement error in a test. Simplified, this interpretation of reliability is the correlation of test with itself. Squaring this correlation and subtracting from 1.00 produces the index of measurement error.

Alpha is an important concept in the evaluation of assessments and questionnaires. It is mandatory that assessors and researchers should estimate this quantity to add validity and accuracy to the interpretation of their data. Nevertheless alpha has frequently been reported in an uncritical way and without adequate understanding and interpretation. High quality tests are important to evaluate the reliability of data supplied in an

examination or a research study. Alpha is a commonly employed index of test reliability. Alpha is affected by the test length and dimensionality. Alpha as an index of reliability should follow the assumptions of the essentially tau equivalent approach. A low alpha appears if these assumptions are not meet. Alpha does not simply measure test homogeneity or unidimensionality as test reliability is a function of test length. A longer test increases the reliability of a test regardless of whether the test is homogenous or not. A high value of alpha ( $> 0.90$ ) may suggest redundancies and show that the test length should be shortened (Field, 2005:668).

Numerical values of alpha as pointed out earlier, the number of test items, item inter-relatedness and dimensionality affect the value of alpha. There are different reports about the acceptable values of alpha, ranging from 0.70 to 0.95. A low value of alpha could be due to a low number of questions, poor inter-relatedness between items or heterogeneous constructs. For example: if a low alpha is due to poor correlation between items then some should be revised or discarded.

**Table 3.5 Results of the Cronbach alphas**

QUESTION GROUPINGS	CONSTRUCTS	CRONBACH'S ALPHA COEFFICIENT
B1 B35 B38 B39 B40 B41	Promotion	0.863
B2 B3 B9 B10 B16 B21 B22 B25 B26 B27 B3	Job Satisfaction	0.908
B4 B5 B11 B17	Nature of work	0.755
B7 B8 B15	Empowerment	0.859
B18 B19 B20	Uncertainty	0.740
B23 B24	Non Satisfied	0.659
B28 B29 B30 B32 B33 B34	Working Conditions	0.915

C1 C6	Communications from supervisors	0.805
C8 C10 C11 C12 C13 C17	Personal support from supervisor	0.881
E2 E3 E6	Pay	0.930
D	***	***
F2 F11 F13	Suppliers on time Delivery	0.567
F4 F5 F6 F12	Performance Departments	0.683
F8 F9 F10	Communications between departments	0.805

### 3.3 JOB SATISFACTION

#### 3.3.1 Construct validity of the measuring instrument

Key indicators of the quality of a measuring instrument are the reliability and validity of the measures. Reliability is any score obtained by a measuring instrument (the observed score) and is composed of both the “true” score, which is unknown, and “error” in the measurement process. The true score is essentially the score that a person would have received if the measurement were perfectly accurate (Zikmund & Banbin, 2007:323). Validity is often defined as the extent to which an instrument measures what it purports to measure. Validity requires that an instrument is reliable, but an instrument can be reliable without being valid (Kent, 200:144-145).

- **Factor 1: (Promotion)**

Factor one comprised of 6 items.

- **Factor 2 : (Nature of work)**

Factor two comprised of 4 items.

- **Factor 3 : (Empowerment)**

Factor 3 comprised of 3 items.

- **Factor 4 : (Working conditions)**

Factor four comprised of 6 items.

- **Factor 5 : (Communication from Supervisor)**

Factor five comprised of 2 items.

- **Factor 6 : (Personal support from Supervisor)**

Factor six comprised of 6 items.

- **Factor 7 : (Satisfaction of Job)**

Factor seven comprised of 11 items.

### **3.3.2 Reliability of the measuring instrument**

To access the internal consistency between the items of the measuring instrument, Cronbach alpha coefficients were calculated (Bryman & Bell, 2007:164). The alpha value provides a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test. Internal consistency should be determined before a test can be employed for research or examination purposes to ensure validity. In addition, reliability estimates show the amount of measurement error in a test. Put simply, this interpretation of reliability is the correlation of test with itself. Squaring this correlation and subtracting from 1.00 produces the index of measurement error (Kent, 2007:142).

### **3.3.3 Relationship between the constructs**

To investigate the relationship between the seven job satisfaction constructs, namely workplace conditions, nature of work, empowerment, supervisor communication,

supervisor personal support, promotion, job satisfaction, the Pearson correlation coefficients (r) were calculated. Factor scores for each participant were computed as the average of all items contributing to the relevant factor. This means that missing values for an individual were automatically replaced by the average of the other responses contributing to the relevant factor for the specific individual (Field, 2005: 111).

In order to determine whether the effect of the relationship between two constructs is important or meaningful, the size of the effect should be measured. Effect sizes are useful because they provide an objective measure of the importance of an effect. A correlation coefficient of 0 means there is no visible relationship and a value of 1 means that there is a perfect relationship. The following is widely accepted guidelines about the interpretation of effects:

- $r = 0.10$  (small effect): in this case, the effect explains 1% of the variance
- $r = 0.30$  (medium effect): the effect accounts for 9% of the variance
- $r = 0.50$  (medium effect): the effect accounts for 25% of the variance (Cohen, 1992:155-159).

**Table 3.1 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion	Job satisfaction	Nature of work	Employee empowerment	Employee competence	Uncertainty	Not Satisfied with job	Workplace conditions	Leadership skills of supervisor	Communication from supervisor	Supervisor personal support	Personal wellbeing	Satisfaction with pay	Fairness with pay
Promotion	1.000	.690**	.622**	.468**	.475**	.487**	.151	.670**	.597**	.648**	.528**	.230	.018	.041
Job satisfaction	.690**	1.000	.680**	.459**	.688**	.615**	-.030	.687**	.446**	.527**	.399**	.255	.050	-.135
Nature of work	.622**	.680**	1.000	.585**	.678**	.608**	.062	.625**	.438**	.495**	.373**	.236	.080	.064
Employee empowerment	.468**	.459**	.585**	1.000	.544**	.376**	.143	.639**	.258	.430**	.455**	.099	.083	.016
Employee competence	.475**	.688**	.678**	.544**	1.000	.676**	-.110	.628**	.136	.332*	.244	.259	.152	-.100
Uncertainty	.487**	.615**	.608**	.376**	.676**	1.000	-.294*	.629**	.276	.360*	.259	.238	.163	-.004
Not satisfied with job	.151	-.030	.062	.143	-.110	-.294*	1.000	.024	-.035	-.020	-.007	.015	-.412**	-.306*
Workplace conditions	.670**	.687**	.625**	.639**	.628**	.629**	.024	1.000	.405**	.512**	.476**	.240	.227	.136
Leadership skills of supervisor	.597**	.446**	.438**	.258	.136	.276	-.035	.405**	1.000	.796**	.605**	.168	.235	.338*
Communication from Supervisor	.648**	.527**	.495**	.430**	.332*	.360*	-.020	.512**	.796**	1.000	.856**	.406**	.297*	.350*
Supervisor personal support	.528**	.399**	.373**	.455**	.244	.259	-.007	.476**	.605**	.856**	1.000	.348*	.195	.258
Personal wellbeing	.230	.255	.236	.099	.259	.238	.015	.240	.168	.406**	.348*	1.000	.143	.153
Satisfaction with pay	.018	.050	.080	.083	.152	.163	-.412**	.227	.235	.297*	.195	.143	1.000	.784**
Fairness with pay	.041	-.135	.064	.016	-.100	-.004	-.306*	.136	.338*	.350*	.258	.153	.784**	1.000

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

The results in Table 3.6 indicate that there are statistical significant ( $p < 0.01$  and  $p < 0.05$ ) correlations between most of the construct combinations.

Practical significant (large effect:  $r > 0.500$ ) correlations with Promotion are shown in table 3.7.

**Table 3.7 Results of the Pearson correlation coefficients (r) between promotion and constructs**

Variable	Job satisfaction	Nature of work	Workplace conditions	Leadership skills of supervisor	Communication from supervisor	Supervisor personal support
Promotion	.690**	.622**	.670**	.597**	.648**	.528**

Practical significant (medium effect:  $r > 0.300$ ) correlations with Promotion are shown in table 3.8.

**Table 3.8 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Employee empowerment	Employee competence	Uncertainty
Promotion	.468**	.475**	.487**

Practical significant (large effect:  $r > 0.500$ ) correlations with Job Satisfaction are shown in table 3.9.

**Table 3.9 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion	Nature of work	Employee competence	Uncertainty	Workplace conditions	Communication from supervisor
Job satisfaction	.690**	.680**	.688**	.615**	.687**	.527**

Practical significant (medium effect:  $r > 0.300$ ) correlations with Job satisfaction are shown in table 3.10.

**Table 3.10 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Employee empowerment	Leadership skills of supervisor
Job satisfaction	.459**	.446**

Practical significant (large effect:  $r > 0.500$ ) correlations with Job satisfaction are shown in table 3.11.

**Table 3.11 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion	Job satisfaction	Employee empowerment	Employee competence	Uncertainty	Workplace conditions
Nature of work	.622**	.680**	.585**	.678**	.608**	.625**

Practical significant (medium effect:  $r > 0.300$ ) correlations with nature of work are shown in table 3.12.

**Table 3.12 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Leadership skills of supervisor	Communication from supervisor
Nature of work	.438**	.495**

Practical significant (large effect:  $r > 0.500$ ) correlations with Employee empowerment are shown in table 3.13.

**Table 3.13 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Nature of work	Employee competence	Workplace conditions
Employee empowerment	.585**	.544**	.639**

Practical significant (medium effect:  $r > 0.300$ ) correlations with Employee empowerment are shown in table 3.14.

**Table 3.14 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion	Job satisfaction	Communication from supervisor	Supervisor personal support
Employee empowerment	.468**	.459**	.430**	.455**

Practical significant (large effect:  $r > 0.500$ ) correlations with Employee competence are shown in table 3.15.

**Table 3.15 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Job satisfaction	Nature of work	Employee empowerment	Uncertainty	Workplace conditions
Employee competence	.688**	.678**	.544**	.676**	.628**

Practical significant (medium effect:  $r > 0.300$ ) correlations with Employee competence are shown in table 3.16.

**Table 3.16 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion
Employee competence	.475**

Practical significant (large effect:  $r > 0.500$ ) correlations with uncertainty are shown in table 3.17.

**Table 3.17 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Job satisfaction	Nature of work	Employee competence	Workplace conditions
Uncertainty	.615**	.608**	.676**	.629**

Practical significant (medium effect:  $r > 0.300$ ) correlations with uncertainty are shown in table 3.18.

**Table 3.18 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion
Uncertainty	.487**

Practical significant (large effect:  $r > 0.500$ ) correlations with Workplace conditions are shown in table 3.19.

**Table 3.19 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion	Job satisfaction	Nature of work	Employee empowerment	Employee competence	Uncertainty	Communication from supervisor
Workplace conditions	.670**	.687**	.625**	.639**	.628**	.629**	.512**

Practical significant (medium effect:  $r > 0.300$ ) correlations Workplace conditions are shown in table 3.20

**Table 3.20 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Leadership skills of supervisor	Supervisor personal support
Workplace conditions	.405**	.476**

Practical significant (large effect:  $r > 0.500$ ) correlations with Leadership skills of supervisor are shown in table 3.21.

**Table 3.21 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion	Communication from supervisor	Supervisor personal support
Leadership skills of supervisor	.597**	.796**	.605**

Practical significant (medium effect:  $r > 0.300$ ) correlations with Leadership skills of supervisor are shown in table 3.22.

**Table 3.22 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Job satisfaction	Nature of work	Workplace conditions
Leadership skills of supervisor	.446**	.438**	.405**

Practical significant (large effect:  $r > 0.500$ ) correlations with Communication from supervisor are shown in table 3.23.

**Table 3.23 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion	Job satisfaction	Workplace conditions	Leadership skills of supervisor	Supervisor personal support
Communication from Supervisor	.648**	.527**	.512**	.796**	.856**

Practical significant (medium effect:  $r > 0.300$ ) correlations with Communication from supervisor are shown in table 3.24.

**Table 3.24 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Nature of work	Employee empowerment	Personal wellbeing
Communication from Supervisor	.495**	.430**	.406**

Practical significant (large effect:  $r > 0.500$ ) correlations with Supervisor's personal support are shown in table 3.26.

**Table 3.25 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Promotion	Leadership skills of supervisor	Communication from supervisor
Supervisor personal support	.528**	.605**	.856**

Practical significant (medium effect:  $r > 0.300$ ) correlations with Supervisor's personal support are shown in table 3.27.

**Table 3.27 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Employee empowerment	Workplace conditions
Supervisor personal support	.455**	.476**

Practical significant (medium effect:  $r > 0.300$ ) correlations with Personal wellbeing are shown in table 3.28.

**Table 3.28 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Communication from supervisor
Personal wellbeing	.406**

Practical significant (large effect:  $r > 0.500$ ) correlations with Satisfaction with pay are shown in table 3.29.

**Table 3.29 Results of the Pearson correlation coefficients (r) between constructs**

Variable	Fairness with pay
Satisfaction with pay	.784**

The factors that had a significant correlation (Large effect  $r > 0.500$ ) value with **Job satisfaction** are **Promotion, Nature of work, Employee competency, Uncertainty, Workplace conditions** and **Supervisor communication**. The factors have an r value of **0.690, 0.680, 0.688, 0.615, 0.687** and **0.527** respectively. All the factors (constructs) are above  $r = 0.500$  and will be seen as the main factors influencing job satisfaction based on this study.

### 3.3 SUPPLY CHAIN PERFORMANCE

#### 3.4.1 Construct validity of the measuring instrument

Key indicators of the quality of a measuring instrument are the reliability and validity of the measures. Reliability is any score obtained by a measuring instrument (the observed score) is composed of both the “true” score, which is unknown, and “error” in the measurement process. The true score is essentially the score that a person would have received if the measurement were perfectly accurate (Zikmund & Banbin, 2007:323). Validity is often defined as the extent to which an instrument measures what it purports to measure. Validity requires that an instrument is reliable, but an instrument can be reliable without being valid (Kent, 200:144-145).

- **Factor 1: Performance of Departments**

Factor one comprised of 4 items.

- **Factor 2: Communication between Departments**

Factor one comprised of 3 items.

- **Factor 3: On time delivery of suppliers**

Factor one comprised of 3 items.

### **3.4.2 Relationship between the constructs**

To investigate the relationship between the seven job satisfaction constructs, namely workplace conditions, nature of work, empowerment, supervisor communication, supervisor personal support, promotion, job satisfaction, the Pearson correlation coefficients ( $r$ ) were calculated. Factor scores for each participant were computed as the average of all items contributing to the relevant factor. This means that missing values for an individual were automatically replaced by the average of the other responses contributing to the relevant factor for the specific individual (Field, 2005: 111).

In order to determine whether the effect of the relationship between two constructs is important or meaningful, the size of the effect should be measured. Effect sizes are useful because they provide an objective measure of the importance of an effect. A correlation coefficient of 0 means there is no visible relationship and a value of 1 means that there is a perfect relationship. The following is widely accepted guidelines about the interpretation of effects:

- $r = 0.10$  (small effect): in this case, the effect explains 1% of the variance
- $r = 0.30$  (medium effect): the effect accounts for 9% of the variance
- $r = 0.50$  (medium effect): the effect accounts for 25% of the variance

The results in Table 3.31 indicate that there are statistical significant ( $p < 0.01$  and  $p < 0.05$ ) correlations between the supply chain performance construct combinations.

Table 3.30 Results of the Pearson correlation coefficients (r) between constructs on Supply Chain Performance

Variable	Suppliers delivering in time	Performance of departments within the dealership	Communication of suppliers within dealership
Suppliers delivering in time	1.000	.341*	.486**
Performance of departments within the dealership	.341*	1.000	.315*
Communication of suppliers within dealership	.486**	.315*	1.000

There were no significant correlation between the main job satisfaction factors mentioned earlier and the supply chain factors used. There was medium effect ( $r < 0.500$ ) correlation between the supply chain factors as shown in the table above. Suppliers delivering on time and communication of departments had a correlation value of 0.486.

### 3.4 COMPARING THE MEAN DIFFERENCES BETWEEN THE DEMOGRAPHIC VARIABLES WITH THE JOB SATISFACTION AND SUPPLY CHAIN PERFORMANCE VARIABLES

The difference in the means between the extracted factors, namely **job satisfaction, promotion, nature of work, employee competency, uncertainty, workplace conditions and supervisor communication** for the demographic variables, gender (male and female), province (Free State and North west) and department (Sales department and Workshop) of the participating managers were examined by an independent t-test (p-values) and effect sizes (d-values).

Statistical significance tests have the tendency to yield small p-values (indication of significance) as the size of the data set increases. The effect size, however, is independent of sample size and is a measure of practical significance (Ellis & Steyn 2003:51). Effect sizes ( $d = 0.2$ ), medium effect ( $d = 0.5$ ) and large effect ( $d = 0.8$ ). Results with medium effects can be regarded as visible effects and with  $d > 0.8$  as practically significant, since it is the result of a difference having a large effect (Field, 2005: 32; Ellis & Steyn, 2003: 51-53; Thompson, 2001: 80-93).

Table 3.32 shows the relationship between the seven variables (extracted factors) and the demographic variables with the means (X), standard deviation (s), independent t-test (p-value) and effect sizes (d-values).

**Table 3.32 Relationship between Job satisfaction main factors and demographical variables**

Construct	Gender						Comparison	
	Male			Female			p	d
	n	mean	s	n	mean	s		
Promotion	26	2.9	0.067	21	2.66	0.7	0.244	0.34
Job satisfaction	26	3.15	0.56	21	3.02	0.69	0.478	0.19
Nature of work	26	2.96	0.67	21	2.79	0.7	0.389	0.25
Employee competence	26	3.04	0.71	21	2.97	0.86	0.764	0.08
Uncertainty	26	2.68	0.94	21	2.97	0.67	0.225	0.31
workplace conditions	26	2.99	0.68	21	3.01	0.71	0.944	0.02
Supervisor communication	26	3.42	0.63	21	3.48	0.54	0.756	0.08
Construct	Department						Comparison	
	Sales department			Workshop			p	d
	n	mean	s	n	mean	s		
Promotion	22	2.689	0.711	16	2.865	0.670	0.444	0.25
Job satisfaction	22	2.925	0.631	16	3.216	0.655	0.180	0.44
Nature of work	22	2.670	0.729	16	3.094	0.605	0.059	0.58
Employee competence	22	2.864	0.746	16	3.083	0.856	0.417	0.26
Uncertainty	22	2.515	0.768	16	3.125	0.654	<b>0.012*</b>	0.79
workplace conditions	22	2.826	0.650	16	3.219	0.649	0.075	0.61
Supervisor communication	22	3.386	0.635	16	3.594	0.523	0.278	0.33
Construct	Province						Comparison	
	Free State			North West			p	d
	n	mean	s	n	mean	s		
Promotion	27	2.772	0.694	14	2.595	0.685	0.443	0.25
Job satisfaction	27	3.165	0.514	14	2.759	0.749	0.085	0.54
Nature of work	27	2.917	0.596	14	2.571	0.787	0.164	0.44
Employee competence	27	3.185	0.594	14	2.571	1.016	<b>0.052*</b>	0.60
Uncertainty	27	2.901	0.800	14	2.452	0.912	0.133	0.49
workplace conditions	27	2.988	0.652	14	2.881	0.766	0.661	0.14
Supervisor communication	27	3.444	0.560	14	3.286	0.642	0.441	0.25

\*Statistical significant at p =0.05 level (2-tailed)

The results indicated that the variable **uncertainty**, ( $p = 0.01$ ,  $d = 0.79$ ), indicated a statistical difference in the mean values between the sales department and workshop in the car dealership. Respondents in the sales department felt more tied to their jobs and scared of what may happen if they resign.

**Employee competence**, ( $p = 0.05$ ,  $d = 0.60$ ), indicated a statistical difference in the mean values between the North West and Free State province. Respondents in the North West province had a more negative response of if they have the right skills and training than the respondents in the Free State.

No practical significant relations were found between the **supply chain factors** and the **demographic factors** mentioned above.

## **4 CHAPTER 4 – RECOMMENDATIONS AND CONCLUSION**

### **4.1 RECOMMENDATION**

Based on the findings in chapter 3, it is evident that Promotion, Nature of Work, Employee Competency, Uncertainty, Workplace Conditions and Supervisor Communication had a large effect on job satisfaction.

- **Promotion**

Management should develop structures that will help employees to be recognised for their efforts and reward them accordingly.

- **Nature of work**

By letting people know that their job is satisfactory more often, will have a positive effect on job satisfaction. Nature of work also has a high correlation with promotion and workplace conditions.

- **Employee competency**

Management must look at implementing more training and skill development courses.

- **Uncertainty**

Results show that employees feeling uncertain about their jobs and scared for looking for a new job has an effect on job satisfaction. By making employees not feel tied to their jobs and give the feeling of this is my only option will have a positive effect on job satisfaction. Based on the demographics variables compared with uncertainty it shows that sales personal feel less certain about their jobs and more fear of leaving their jobs. The reason could be that sales people are commission based and resultantly it has a large effect on their salaries. Improving the nature of work, employee competence and workplace conditions will have a positive effect on uncertainty and ultimately increase job satisfaction. The factors mentioned in this paragraph have a high correlation coefficient with uncertainty.

- **Workplace conditions**

By improving equipment and employing sufficient staff members, will help employees cope better, which will result in an increase on job satisfaction?

- **Supervisor communication**

Efficient communication from supervisors will definitely increase job satisfaction. Management should seriously look at better ways of communicating more effectively with employees. Personal support from supervisors had a high correlation with supervisor communication (shown in chapter 3) and by supervisor getting more involved with employee needs and emotions will increase supervisor communication and ultimately have a positive effect on job satisfaction.

#### **4.2 RECOMMENDATIONS ON SUPPLY CHAIN PERFORMANCE RESULTS**

Unfortunately there were no sufficient correlation between the factors measured for job satisfaction and factors measured for supply chain performance and thus no statistical significant relationship ( $H_0$  – stated in chapter 1). Thus further studies should be done on to determine if job satisfaction has an effect on supply chain performance within a car dealership.

There was medium effect ( $r < 0.500$ ) between the supply chain factors as shown in the table above. Suppliers delivering on time and communication of departments had an effect size of 0.486. By implementing structures to better the communication between departments within a car dealership will help suppliers to dealerships to deliver on time.

#### **4.3 CONCLUSION**

Job satisfaction can improve service quality and increase employee satisfaction. In this circumstance, policy makers and managers have turned their attention to provide different kinds of facilities to their employees in order to satisfy their employees. This study tested factors affecting job satisfaction for Motor dealerships and if this factors

effect supply chain performance. The results suggest that the factors had satisfactorily explained job satisfaction and that the managers should focus on the factors that affect job satisfaction, if they want to enhance their businesses. Based on the results for the standardized values, we are able to see that workplace conditions, nature of work, promotion, employee competency, supervisor communication and supervisor personal support are key factors affecting employees in the car dealerships. The factor of work conditions is proven to have significant influence. The work conditions the employee relationships and nature of work, all these factors relate to job satisfaction. A good work environment and good work conditions can increase job satisfaction and the employees will try to give their best which can increase the work performance. Results of the study reveal that sales personal are more worried about leaving their job than personal in other departments. It was found that employees from different providence felt less competent than employees in other providence. In this study there were no significant correlation between the supply chain performance factors measured and the main factors of job satisfaction (determined in this study on car dealership).

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## APPENDIX A: JOB SATISFACTION QUESTIONNAIRE

The purpose of this study is to obtain an accurate picture of how you personally evaluate specific aspects of your work and work environment in Automotive industry. Please read each statement carefully and decide if you feel this way. Please do not skip any questions.			
<b>Section A:</b>			
Please fill in/mark with an "x" the information required below.			
1	Age	Years	
2	Gender	Male	
		Female	
3	Marital status	Married	
		Divorced	
		Single	
		Widow	
		Other (Specify)	
4	Highest level of education	Grade 10 (Standard 8)	
		Matric	
		Diploma	
		B. Degree	
		Honours	
		Masters	
		Doctorate	
		Other (Specify)	
5	In which department do your work?	Sales department	
		Workshop	
		Parts	
		Finance	
5	In which province is your dealership based	Free State	
		North West Province	
		Northern Cape	
		Other (Specify)	
6	What is your job title in the department you are working in?	Manager	
		supervisor	
		Technician	
		Operator	
		Other (Specify)	
7	Is your salary the <b>primary</b> source of financial support for your family?	Yes	
		No	
8	Home language	Afrikaans	
		English	
		Other (Specify)	

**Section B:** To What  
 extent do you **AGREE OR DISAGREE** with each statement. Please fill an "x" in the appropriate block. For each statement please choose one of the following: *Strongly disagree, Disagree, Agree or Strongly agree.*

Workplace conditions		Strongly disagree	Disagree	Agree	Strongly agree
1	My work provides good opportunities for advancement in my department.				
2	The tasks I perform in my work are meaningful to me.				
3	The things I do in my work are important to me.				
4	I usually know whether or not my work is satisfactory for my supervisor.				
5	My work objectives are clearly defined.				
6	The amount of work I am expected to do is fair.				
7	I have the freedom to do my work as I see fit.				
8	It is <b>primarily</b> my own responsibility to decide how I do my work.				
9	I do a number of different tasks in my work.				
10	In my work I render a complete service.				
11	I can see the results of my work.				
12	I have sufficient experience to do my work.				
13	I possess the necessary skills to do my work.				
14	I do have sufficient training to do my work.				
15	My work allows me to control my own pace of work.				
16	I am personally involved in my work.				
17	My salary is directly linked to how well I perform.				
18	It would be difficult for me to leave this organisation even if I wanted to.				
19	I dread the thought of what might happen to me should I quit my job without having another one lined up.				
20	I have too much at stake in my work to change jobs now.				
21	My job is usually enough of a challenge to prevent me from becoming bored.				
22	I am satisfied with my job				
23	I will probably look for a new job in the near future.				
24	I often think about resigning.				
25	I like working for the company.				
26	I like working at the dealership.				
27	In general I like my job.				
28	Equipment and resources I need to do my work with are <b>adequate</b> .				
29	Equipment and resources I need to do my work with are <b>efficient</b> .				
30	Equipment and resources I need to do my work with are <b>well-maintained</b> .				
31	I am willing to put in a great deal of effort, to help this organisation to be effective.				
32	The system I use in my department is in good working condition				
33	My department has <b>sufficient staff</b> .				
34	The department has <b>sufficient equipment</b> .				
35	In my work place I have the opportunity to use my special skills and abilities.				
36	The way you are treated by the people (colleagues) you work with.				
37	The friendliness of the people you work with.				
38	Have opportunities to <b>learn new things</b> in your work.				
39	Have opportunities to <b>accomplish something worthwhile</b> in your work.				
40	Have opportunities to do something that <b>makes you feel good about yourself as a person</b> .				
41	Have opportunities to <b>take part in decision making</b> .				

**SECTION C:**

Please indicate to what EXTENT YOU AGREE OR DISAGREE with each statement as descriptions of your direct supervisor. Please fill an "x" in the appropriate block. For each statement please choose one of the following: *Strongly disagree, Disagree, Agree or Strongly agree.*

My supervisor/manager.....		Strongly disagree	Disagree	Agree	Strongly agree
1	expects that people give their best.				
2	encourage people to work hard.				
3	stays informed about work which is being done.				
4	plans work in advance.				
5	handles the administrative aspects of his or her job well.				
6	demands that high standards of performance are maintained.				
7	make sure everyone knows what has to be done.				
8	helps me solve work related problems.				
9	keeps everyone informed.				
10	helps one to develop one's skills.				
11	always treats me fairly.				
12	helps me with our personal problems.				
13	is concerned about me as a person.				
14	encourages people to speak up when they disagree with a decision.				
15	is competent in his work.				
16	encourages us to work together as a team.				
17	has confidence and trust in me.				
18	is a good leader.				
19	gets along well with others.				

Section D:					
Indicate HOW FREQUENTLY the following statements apply to you. Please fill an "x" in the appropriate block. For each statement please choose one of the following: <i>Almost always, Often, seldom or Almost never.</i>					
Personal well being		Almost always	Often	Seldom	Almost never
1	Work demand cause disruption of family relationship.				
2	I feel downhearted and depressed.				
3	I feel tired for no reason.				
4	I feel restless.				
5	I feel unneeded.				
6	I have considered quitting my job and finding a new job.				
7	I experience tension as a result of making decisions in my work.				

Section E:					
Please indicate to what extent you agree with each statement as descriptions of your salary. Please fill an "x" in the appropriate block. For each statement please choose one of the following: <i>Strongly disagree, Disagree, Agree or Strongly agree.</i>					
You and your salary		Strongly disagree	Disagree	Agree	Strongly agree
1	I am happy with the money I earn.				
2	I do earn the kind of money I should for the work I do.				
3	Considering my skills and the effort I put into my work I am satisfied with my salary.				
4	My salary is fair in comparison to the salaries of my colleagues.				
5	All in all, salaries are administrated well in this organization				
6	My salary is about what it ought to be.				
7	My pay is fair.				

**Section F:**  
**Please indicate to what EXTENT YOU AGREE with each statement. Please fill an "x" in the appropriate block. For each statement please choose one of the following: *Strongly disagree, Disagree, Agree or Strongly agree.***

Efficient supply chain performance		Strongly disagree	Disagree	Agree	Strongly agree
1	The dealership can improve in some departments.				
2	There is sufficient accessibility to stock/vehicles/parts.				
3	Never have a problem to deliver customers vehicles to them on time.				
4	Vehicles delivered late to customers due to workshop not finishing in time.				
5	Vehicles delivered late to customers due parts department not delivering on time.				
6	Finance department are taking to long to finance customers vehicle.				
7	There is consistent attention from management to making this organisation as effective and functional as possible.				
8	The information I receive about the customers vehicle in the workshop department is sufficient.				
9	The information I receive about the customers vehicle in the parts department is sufficient				
10	The information I receive about the customers vehicle in the finance department is sufficient.				
11	The system I use in my department to track stock/vehicles/parts are up to standard				
12	Work to be done on vehicles within other departments is on time.				
13	Delivery from manufacturer/other dealership are on time				

**APPENDIX B: LETTER FROM EDITOR**

November 30, 2013



**TO WHOM IT MAY CONCERN**

**Re: Letter of confirmation of language editing**

The MBA dissertation Wessel Kleynhans (12517755) was language, technically and typographically edited. The sources and referencing technique applied was checked to comply with the specific Harvard technique as per North-West University prescriptions. Final corrections as suggested remain the responsibility of the student.

**Antoinette Bisschoff**

Officially approved language editor of the NWU since 1998

Member of SA Translators Institute (no. 1001891)