Does Mercedes-Benz Service Customer Satisfaction Measure the Service Advisor Emotional Intelligence?

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"today's workforce is being judged by a new yardstick"

Daniel Goldman (1998), Working with Emotional Intelligence

i

ABSTRACT

In South Africa's automotive industry where product features are very similar among vehicles, where there is huge competition between the vehicle brands, whether they are imported or locally produced, what is the leverage one can use to gain a competitive advantage? What will be the means of differentiation? The answer and the ultimate business advantage may very well be customer service excellence.

In an effort to measure service excellence, South African customer satisfaction questionnaires, have historically via the questions that they ask and the weightings they give to these questions emphasised the transactional component of customer satisfaction. South African automotive retailers however need to understand the relationship component of the satisfaction of customers. This research shows that the current definition of Customer satisfaction does not measure this relation component as defined by emotional intelligence of the service advisors.

Suggestions are given at the end of the report as to how this situation can be changed and the advantages that can be taken for automotive retailers.

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University.

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Darret King

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CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 INTRODUCTION

1.1 Introduction

This chapter will aim to describe the purpose of this study and why it is important, give a background to the South African automotive industry, define the research problem and introduce the structure of this report to the reader.

1.2 Background

In South Africa's automotive industry where product features are very similar among vehicles, where there is huge competition between the vehicle brands, whether they are imported or locally produced, what is the leverage one can use to gain a competitive advantage? What will be the means of differentiation? The answer and the ultimate business advantage may very well be customer service excellence. Despite the increasing awareness of the importance of customer service to business, there appears to be a "missing link" that constrains South African Automotive companies in achieving the consistent levels of customer service excellence that can bring about a sustainable competitive advantage. Despite efforts to enhance customer service through various initiatives and training programmes for employees, customer satisfaction consistency, as perceived by the customer, has not risen to expected levels as observed through the published Competitive Customer Satisfaction Index (Synovate, 2007).
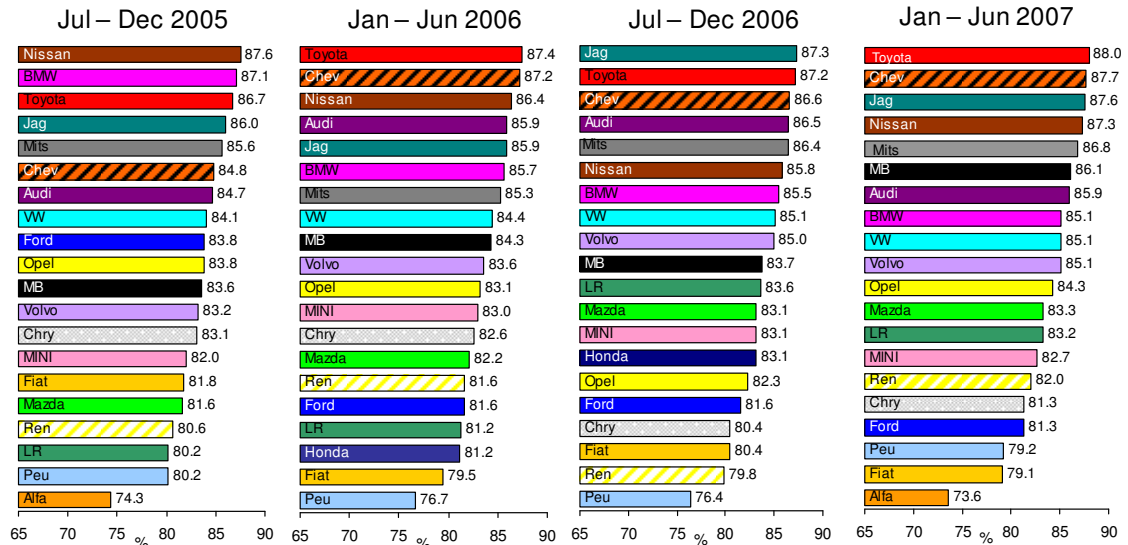
Figure 1 – Synovate Overall Competitive Customer Satisfaction Index - Passenger Vehicles
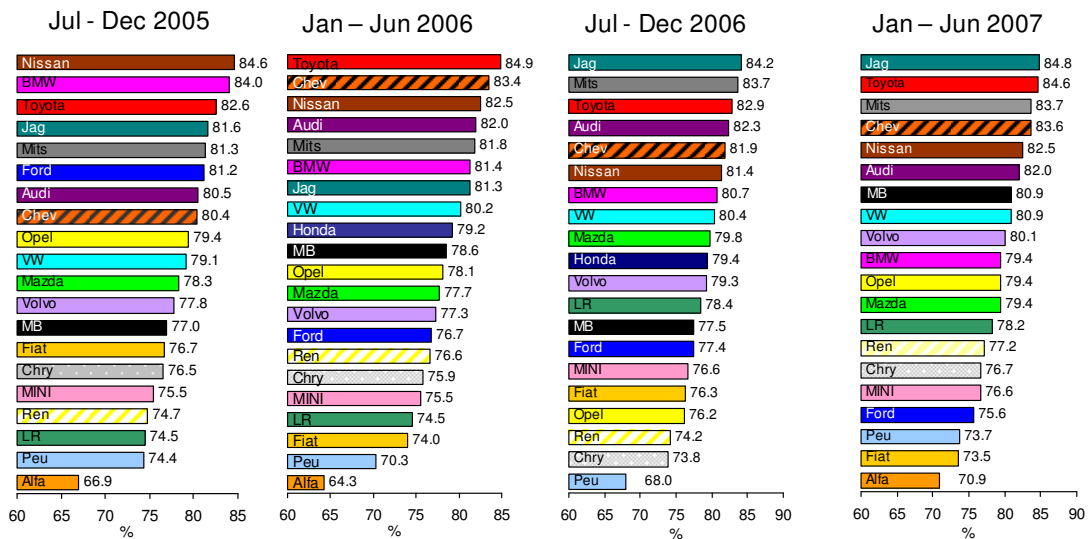
Figure 2 - Synovate Service Competitive Customer Satisfaction Index - Passenger Vehicles

1.3 Purpose of the Study

The questions asked today, by vehicle manufacturers in South Africa, to determine the degree of satisfaction of customers during their service experience, focus predominantly on the degree to which execution of predetermined processes (Appendix 1: DaimlerChrysler Mercedes-Benz Service CSI Questions.) have taken place. While the execution of predetermined processes are important, to ensure that certain basic minimums that customers require to heighten their satisfaction are performed, service provider behaviour and emotions play an important role in determining customer satisfaction (Walker, 1995).

If customer service is a competitive advantage and behaviour and emotions play an import role, then the aim of the research is to understand if the Mercedes-Benz customers satisfaction scores, measures the behaviour and emotions of Mercedes-Benz service advisors.

1.4 Problem Background

Vehicle retailing in South Africa is among the most diverse and competitive in the world, with virtually every major global brand competing for a slice of a still developing market. This market saw 96 934 or 15.7% more vehicles being sold in 2006 than the year before (National Association of Automobile Manufacturers of South Africa, 2006).

The challenge in this market is that the rate of increase of vehicle sales is by far outpacing the number of vehicles coming off the road (National Association of

Automobile Manufacturers of South Africa, 2006). This expanding vehicle parc that needs to have dealerships to service this increased capacity. The dealers' capacity to service vehicles is not expanding at the same rate as vehicle sales, but customers' expectations of a satisfactory service experience still have to be met in an environment that is more and more crowded every day (Joyce, 2007).

This increased pressure in the service environment has the potential to impact customer satisfaction. The dealership would however want to keep the satisfaction high, as there are several key benefits of high customer satisfaction for a company (Fomell, 1992). In general, high customer satisfaction should indicate increased loyalty by current customers, reduced price elasticity, padding of current customers from competitive efforts, lower costs of future transactions, reduced failure costs, lower costs of attracting new customers, and an enhanced reputation for the firm. Increased loyalty of current customers means more customers will repurchase in the future. If a company has strong customer loyalty, it should be reflected in the firm's economic returns because it ensures a steady stream of future cash flows (Reichheld & Sasse, 1990).

If high customer satisfaction is desired, as seen above, then Walker (1995) points out that the elements of a service experience, including the physical surroundings, waiting time, and importantly, the behaviour and performance of service providers, can influence the customers level of satisfaction.

In an automotive dealership the Service Advisors are the people who are the interface between the customer and the dealership during the service

4

experience. It is thus their behaviour and emotions (Walker, 1995) that can influence the customers' level of satisfaction. Emotional intelligence is the ability to perceive one's own and others' emotions and to accurately express one's own emotions, facilitate thought and problem solving through use of emotion, understand the causes of emotion and relationship between emotional experiences, and manage one's own and others' emotions (Salovey, et al., 2002).

A Service Advisor who manifests the emotional intelligence abilities listed above is likely to create a service encounter that leads to high customer satisfaction and long term financial benefits to the dealership.

1.5   South Africa's Automotive Industry

Most of the major world brands are represented in South Africa, either by their multinational source companies or by independent distributors. At present, the broader automotive industry represents the largest manufacturing sector in the South African economy and accounts for approximately 28 percent of the country's manufacturing output (CS Market Research, 2006). Vehicle exports have also grown around ninefold since 1994, and now account for nearly 7% of the country's exports (www.southafrica.info).

Overall, the automotive industry - including manufacturing, distributing and servicing of vehicles and components - is the third largest sector in the economy, after mining and financial services, contributing in the region of 7% to gross domestic product. Domestic new vehicle sales soared by a record 22% in

2004, followed by a new record 27% in 2005, and 15.7% in 2006, making the country one of the best performing automobile markets internationally (CS Market Research, 2006).

There are over 20,000 enterprises active in selling and providing aftermarket support for South Africa's seven million passenger and commercial vehicles, including an indeterminate number of enterprises in the informal sector. The distribution of the national vehicle population is mirrored in the location of around 5,500 garages and filling stations with their associated workshops, the 3,300 specialist repairers, around 1,100 franchised new car dealerships, nearly 1,000 used-vehicle retailers, 450 specialist tire dealers and re-treaders, 500 engine re-conditioners, 80 vehicle body builders, 650 parts dealers (new and aftermarket) and about 280 farm vehicle and equipment suppliers. These generate about $16.6 billion annually in domestic motor business revenues (CS Market Research, 2006).

It can be seen in the information presented on the South African Automotive industry that this is a significant part of our economy, and that vehicle manufactures from around the globe are trying to grab a stake in this expanding success story. It is in this acquisition for customers that we must try to obtain competitive advantages against the ever increasing number of new models (National Association of Automobile Manufacturers of South Africa, 2007) in this environment.

1.6 Research Problem

Sekaran (1992) defined the problem statement as a "clear, precise and succinct statement of the question or issues that is to be investigated with the goal of finding an answer or solution". Accordingly, this research aims to understand if the measures of customer satisfaction as defined for Mercedes-Benz Service CSI, measure the influence of emotion in the service. The research problem requiring investigation is as follows:

"Does the Mercedes-Benz Customer Satisfaction Index measure the ability of a service advisor to accurately and effectively perceive, express, understand and regulate emotions in him or herself and others during the service experience?"

1.7 Structure of the Report

In Chapter 1, the background to, and the motivation for, this study is described, and the research problem and objectives are stated. Chapter 2 summarises the relevant theoretical underpinning of the study and presents an overview of other studies that analyse the emotional intelligence and its effects on the workplace as well as customer satisfaction. Chapter 3 describes the research objective with the hypotheses and propositions addressed in this study. Chapter 4 gives details of the research method, defines the unit of analysis and gives a general description of the data used in the empirical analysis. Chapter 5 presents an analysis of the results obtained from the data. Chapter 6 follows this up with a detailed discussion of the results according to the hypotheses and propositions in Chapter 3. Chapter 7, the last chapter, gives a conclusion of the main

findings of the research, and makes recommendations for future areas of research.

1.8 Research Gaps

There are many surveys and reports conducted by renowned scientists like John Mayer (1990), Peter Salovey (1990), Richard Boyatzis (2000), David McClelland (1999) and Daniel Goleman (2000) on how EQ can affect an individual's success in an organisation as well as organisational success overall. However, the literature has been relatively silent about EQ and customer service success especially in the automotive industry. Little has been written how EQ has positive impact on customer service in the automotive industry. This research aims to extend the body of knowledge by filling these gaps.

1.9 Summary

This chapter introduced the background to the automotive industry and its impact on the South African economy. The automotive industry with its ever increasing number of players was shown to measure customer satisfaction, but that consistent high customer satisfaction, as seen in the CCSI results, was absent.

Customer satisfaction was noted as something each business should strive for as it has many benefits, but that the employee behaviours and emotions play a large part in the satisfaction of customer. The measurement of that emotion in

service advisors customer satisfaction results was presented as the research question.

2 LITERATURE REVIEW

2.1 Introduction

An investigation into the research problem, identified in Chapter 1, involves a review of developments relating to the major schools of thought on the research issue. One aim is to identify pertinent gaps or methodological weaknesses in the existing literature to enable crafting of the research questions which form the basis for articulating the research hypotheses as a basis for seeking solutions to the research problem.

This chapter commences with an understanding of the research issues, which necessitates an appreciation of the fields of knowledge relating to both emotional intelligence and customer satisfaction. The concept of emotional intelligence (EQ) and the effects of EQ being applied to provide customer service excellence for competitive advantage for an organisation will be explored.

Section 2.2 focuses setting the stage for what emotional intelligence is and how it is defined. The authors of the three main models of emotional intelligence are introduced.

Section 2.3 critically analyses the ability and mixed models of emotional intelligence and their related constructs. The ability based model of emotion intelligence introduced is the Salovey and Meyer model. The mixed models that

are discussed are the Goldman and Bar-On models. The Bar-On EQi scale and sub scale constructs are also detailed the section then lastly goes on the compare the models understanding the relationships between them.

Section 2.4 reviews emotional intelligence and its related constructs. The impact of age, gender and ethnicity on the Bar-On model is explained. Competing evidence around gender difference is then added, together with findings on how emotional intelligence can be a predictor of life satisfaction.

Section 2.5 discusses one of the most applied constructs which emotional intelligence has been associated with, that of leadership. Other workplace issues such as cost effectiveness and training of emotional intelligence are also noted. Lastly research is shown that individuals with high EQ, have a better change of being successful together with high IQ.

Section 2.6 initially focuses on the definition of customer service and that customer service has technical and relational components. The section then continues showing the current problems facing customer service, and that every opportunity to interact with customers can enhance or damage the organisations reputation.

Section 2.6 provides us with information about how emotional intelligence and customer service link together.

Section 2.8 sets out the conclusions of the literature review.

11

2.2   Emotional Intelligence

Since the best selling book *Emotional Intelligence* (Goleman, 1995) was published by Daniel Goldman, the topic of Emotional Intelligence has received a lot of interest.

But what is emotional Intelligence? At a basic level, emotional intelligence (EI) is to the ability to recognize and regulate emotions in ourselves and others (Goleman, 2001). Peter Salovey and John Mayer, who originally used the term "emotional intelligence" in published writing, initially defined emotional intelligence as:

"A form of intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" *(Salovey & Mayer, 1990).*

Later, these authors revised their definition of emotional intelligence. Emotional intelligence is currently now generally defined as:

"The ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth." *(Salovey & Mayer, 1997).*

Another prominent researcher of the emotional intelligence construct is Reuven Bar-On, the originator of the term "emotion quotient" (EQ). Bar-On defines emotional intelligence as being concerned with understanding oneself and others, relating to people, and adapting to and coping with the immediate surroundings to be more successful in dealing with environmental demands (Bar-On, 1997).

2.3   Emotional Intelligence Models

The Encyclopaedia of Applied Psychology (Sharan & Sharan, 2003) states that there are three major models of emotional intelligence:

- The Mayer-Salovey model which defines this construct as the ability to perceive, understand, manage and use emotions to facilitate thinking.
- The Goleman model which views it as an array of emotional and social competencies that contributes to managerial performance.
- The Bar-On model which describes EI as a cross-section of interrelated emotional and social competencies, skills and facilitators that impact intelligent behaviour.

Each theoretical model views emotional intelligence from one of two perspectives: ability or mixed model. Ability models regard emotional intelligence as a pure form of mental ability and thus as a pure intelligence. In contrast, mixed models of emotional intelligence combine mental ability with personality characteristics such as optimism and well-being (Mayer, 1999).

Currently, the only ability model of emotional intelligence is that proposed by John Mayer and Peter Salovey. Two mixed models of emotional intelligence have been proposed, each within a somewhat different conception. Reuven Bar-On has put forth a model based within the context of personality theory, emphasizing the co-dependence of the ability aspects of emotional intelligence with personality traits and their application to personal well-being. In contrast, Daniel Goleman proposed a mixed model in terms of performance, integrating an individual's abilities and personality and applying their corresponding effects on performance in the workplace (Goleman, 2001)

2.3.1 Salovey and Mayer: An Ability Model of Emotional Intelligence

Peter Salovey and John Mayer first coined the term "emotional intelligence" in 1990 (Salovey & Mayer, 1990) and have since continued to conduct research on the significance of the construct. Their pure theory of emotional intelligence integrates key ideas from the fields of intelligence and emotion. From intelligence theory comes the idea that intelligence involves the capacity to carry out abstract reasoning. From emotion research comes the notion that emotions are signals that convey regular and discernable meanings about relationships and that at a number of basic emotions are universal (Mayer, et al., 2002) They propose that individuals vary in their ability to process information of an emotional nature and in their ability to relate emotional processing to a wider cognition. They then posit that this ability is seen to manifest itself in certain adaptive behaviours (Mayer, et al., 2000).

14

Mayer and Salovey's conception of emotional intelligence is based within a model of intelligence, that is, it strives to define emotional intelligence within the confines of the standard criteria for a new intelligence (Mayer, et al., 2003). It proposes that emotional intelligence is comprised of two areas: experiential (ability to perceive, respond, and manipulate emotional information without necessarily understanding it) and strategic (ability to understand and manage emotions without necessarily perceiving feelings well or fully experiencing them). Each area is further divided into two branches that range from basic psychological processes to more complex processes integrating emotion and cognition. The first branch, emotional perception, is the ability to be self-aware of emotions and to express emotions and emotional needs accurately to others. Emotional perception also includes the ability to distinguish between honest and dishonest expressions of emotion. The second branch, emotional assimilation, is the ability to distinguish among the different emotions one is feeling and to identify those that are influencing their thought processes. The third branch, emotional understanding, is the ability to understand complex emotions (such as feeling two emotions at once) and the ability to recognize transitions from one to the other. Lastly, the fourth branch, emotion management, is the ability to connect or disconnect from an emotion depending on its usefulness in a given situation (Mayer & Salovey, 1997).
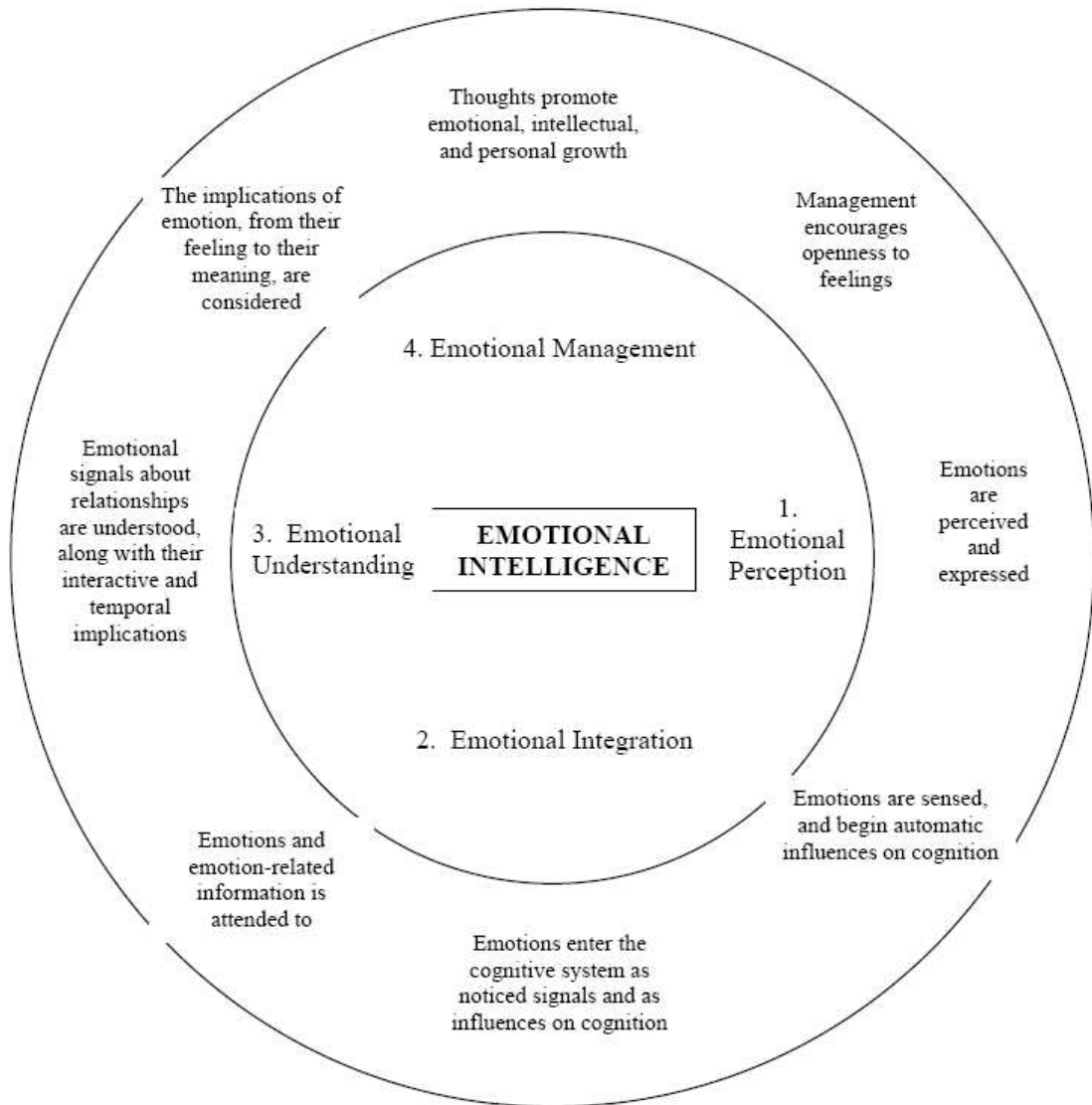
Figure 3 - Mayer and Salovey's (1997) Four-Branch Model of Emotional Intelligence

2.3.2 *Goleman: A Mixed Model of Emotional Intelligence*

Daniel Goleman, a psychologist and science writer who has previously written on brain and behaviour research for the New York Times, discovered the work of Salovey and Mayer in the 1990's. Inspired by their findings, he began to conduct his own research in the area and eventually wrote Emotional Intelligence (Goleman, 1995) the landmark book which familiarized both the

16

public and private sectors with the idea of emotional intelligence. Goleman's model outlines four main emotional intelligence constructs (Table 1 - Goleman's (2001) Emotional Intelligence Competencies). The first, self-awareness, is the ability to read one's emotions and recognize their impact while using gut feelings to guide decisions. Self-management, the second construct, involves controlling one's emotions and impulses and adapting to changing circumstances. The third construct, social awareness, includes the ability to sense, understand, and react to other's emotions while comprehending social networks. Finally, relationship management, the fourth construct, entails the ability to inspire, influence, and develop others while managing conflict (Goleman, 1998).

Goleman includes a set of emotional competencies within each construct of emotional intelligence. Emotional competencies are not innate talents, but rather learned capabilities that must be worked on and developed to achieve outstanding performance. Goleman posits that individuals are born with a general emotional intelligence that determines their potential for learning emotional competencies. The organization of the competencies under the various constructs is not random; they appear in synergistic clusters or groupings that support and facilitate each other (Boyatzis, et al., 1999). The constructs and competencies fall under one of four categories: the recognition of emotions in oneself or others and the regulation of emotion in oneself or others.

	Self	Other
	Personal Competence	Social Competence
Recognition	**Self-Awareness**	**Social Awareness**
	Emotional	Empathy
	Self-Awareness	Service Orientation
	Accurate Self-Assessment	Organizational Awareness
	Self-Confidence	
Regulation	**Self-Management**	**Relationship Management**
	Self-Control	Developing Others
	Trustworthiness	Influence
	Conscientiousness	Communication
	Adaptability	Conflict Management
	Achievement Drive	Leadership
	Initiative	Change Catalyst
		Building Bonds
		Teamwork and Collaboration

Table 1 - Goleman's (2001) Emotional Intelligence Competencies

2.3.3   Bar-On: A Mixed Model of Emotional Intelligence

The director of the Institute of Applied Intelligences in Denmark and consultant for a variety of institutions and organizations in Israel, Reuven Bar-On developed one of the first measures of emotional intelligence that used the term "Emotion Quotient" (EQ). Bar-On's model of emotional intelligence relates to the potential for performance and success, rather than performance or success

itself, and is considered process-oriented rather than outcome-oriented (Bar-On, 2002). It focuses on an array of emotional and social abilities, including the ability to be aware of, understand, and express oneself, the ability to be aware of, understand, and relate to others, the ability to deal with strong emotions, and the ability to adapt to change and solve problems of a social or personal nature (Bar-On, 1997). In his model, Bar-On outlines 5 components of emotional intelligence: intrapersonal, interpersonal, adaptability, stress management, and general mood (Table 2 - Bar-On's Model of Emotional Intelligence). Within these components are sub-components, Bar-On posits that emotional intelligence develops over time and that it can be improved through training, programming, and therapy (Bar-On, 2002).

Intrapersonal	Self Regard
	Emotional Self-Awareness
	Assertiveness
	Independence
	Self-Actualization
Interpersonal	Empathy
	Social Responsibility
	Interpersonal Relationship
Adaptability	Reality Testing
	Flexibility
	Problem Solving
Stress Management	Stress Tolerance

	Impulse Control
General Mood Components	Optimism
	Happiness

Table 2 - Bar-On's Model of Emotional Intelligence

Bar-On hypothesizes that those individuals with higher than average E.Q.'s are in general more successful in meeting environmental demands and pressures. He also notes that a deficiency in emotional intelligence can mean a lack of success and the existence of emotional problems. Problems in coping with one's environment is thought, by Bar-On, to be especially common among those individuals lacking in the subscales of reality testing, problem solving, stress tolerance, and impulse control. In general, Bar-On considers emotional intelligence and cognitive intelligence to contribute equally to a person's general intelligence, which then offers an indication of one's potential to succeed in life (Bar-On, 2002).

2.3.3.1 Bar-On EQI Scale and Sub Scale Constructs

Intrapersonal EQ Scale

The Intrapersonal EQ scale assesses the inner self. The subscales of the Intrapersonal scale include Self-Regard, Emotional Self-Awareness, Assertiveness, Independence, and Self-Actualization. High scores on this composite scale indicate individuals who are in touch with their feelings, feel good about themselves, and feel positive about what they are doing in their lives. These people are able to express their feelings, and they are

independent, strong, and confident in conveying their ideas and beliefs. A high intrapersonal level would definitely be an asset, for example, in people involved in sales, public relations, and marketing.

Interpersonal EQ Scale

The Interpersonal EQ scale taps interpersonal skills and functioning. The subscales of the Interpersonal scale include Empathy, Social Responsibility, and Interpersonal Relationship. High scores in this domain signify responsible and dependable individuals who have good social skills-they understand, interact, and relate well with others. These people function well in positions that require interacting with others and teamwork. Well developed interpersonal skills are important for people involved in customer service, management, and leadership.

Adaptability EQ Scale

The Adaptability composite scale comprises of Reality Testing, Flexibility, and Problem Solving subscales. The Adaptability score helps reveal how successfully one is able to cope with environmental demands by effectively "sizing up" and dealing with problematic situations. High scores on this composite scale identify people who are generally flexible, realistic, effective in understanding problematic situations, and competent at arriving at adequate solutions. High scores indicate people who can generally find good ways of dealing with everyday difficulties. Not only is adaptability a valuable attribute in and of itself for daily living and normal functioning, but respondents who score high on this composite scale can make a substantial contribution in the

workplace. These people might do well in research and development and technical support departments, for example.

Stress Management EQ Scale

The Stress Management component of the EQ-i consists of the Stress Tolerance and Impulse Control subscales. Respondents with high scores on this composite scale are able to withstand stress without "falling apart" or losing control. They are generally calm, rarely impulsive, and work well under pressure. People who receive high scores on this component can handle tasks that are stressful or anxiety provoking or that involve an element of danger. Stress management

skills are critical for people who work on "the front line," such as police officers, fire-fighters, emergency medical staff, social workers, and combat soldiers.

General Mood EQ Scale

The subscales of the General Mood EQ scale consist of the Happiness and Optimism factors. This component of the inventory measures one's ability to enjoy life as well as one's outlook on life and overall feeling of contentment. High scores generally indicate cheerful, positive, hopeful, and optimistic individuals who know how to enjoy life. In addition to being an essential element in interacting with others, this attribute is an influential motivational component in problem solving and stress tolerance. Individuals who score high on General Mood help to create an uplifting and positive atmosphere in the workplace.

Interpret the EQ Sub scale Scores

22

The next level of interpretation is at the EQ subscale level. While the composite scale scores give a *general* indication of coping abilities and present functioning, one can pinpoint *specific* strengths and weaknesses (which need to be explored and dealt with further) by examining the subscale scores.

intrapersonal Subscales

Self-Regard: Respondents with high scores on this subscale tend to accept and respect themselves. They have a good sense of self-esteem, feel positive about themselves, and know who they are.

Emotional Self-Awareness: High scores on this subscale indicate respondents who are "in touch with" their feelings and emotions-they know what they are feeling and understand why they feel the way they do.

Assertiveness: High scores on this subscale identify individuals who are able to express feelings, thoughts, and beliefs and defend their rights in a non-destructive manner. These people are rarely limited by uncomfortable feelings of self-consciousness or bashfulness.

Independence: People who are self-reliant, autonomous, and independent in their thinking and actions tend to receive high scores on this subscale. These people may ask for and consider the advice of others, but they rarely depend upon others to make important decisions or do things for them. These people rarely cling to other people.

23

Self-Actualization: High scores on this subscale are obtained by individuals who are able to realize their potential and who become involved in pursuits that lead to meaningful, rich, and full lives. These people have a good idea of where they are going (or want to go) and why.

Interpersonal Subscales

Empathy: High scores on this subscale are obtained by individuals who are aware of and can appreciate the feelings of others. They are sensitive to others' feelings and can understand why they feel the way they feel.

Social Responsibility: High scores on this subscale identify individuals who are cooperative, contributing, and constructive members of their social groups. These people are often described as responsible and dependable.

Interpersonal Relationship: Respondents who are able to establish and maintain mutually satisfying relationships generally obtain high scores on this subscale. These people are characterized by the capacity for intimacy and the giving and receiving of affection.

Adaptability Subscales

Reality Testing: High scores on this subscale are achieved by individuals who are able to evaluate the correspondence between what they experience (the subjective) and what in reality exists (the objective). These people are often described as realistic, "well grounded," and "tuned in" to their environments;

24

their general approach in life involves actively *examining* rather than passively or naively *assuming.* They are usually good at "sizing up" the situation.

Flexibility: Respondents with elevated scores on this subscale have an enhanced ability to adjust their emotions, thoughts, and behaviours to changing situations and conditions.

Problem Solving: Respondents who are fairly adept at recognizing and defining problems as well as generating and implementing potentially effective solutions perform well on the Problem Solving subscale. These people attempt to solve problems rather than avoid them.

Stress Management Subscales

Stress Tolerance: High scores on this subscale identify individuals who are able to withstand adverse events and stressful situations, without "falling apart." These people are generally able to cope with stress actively and positively. They are calm and rarely get overly anxious or agitated.

Impulse Control: High scores on the Impulse Control subscale are received by respondents who are able to resist or delay impulses and defer drives and temptations to act. People with good impulse control rarely become impatient, overreact, or lose control.

General Mood Subscales

Happiness: Individuals who are able to feel satisfied with their lives, genuinely enjoy the company of others, and have the ability to derive pleasure from life achieve high scores on this subscale. These people commonly have a happy disposition and are pleasant to be with.

Optimism: High scores on the Optimism subscale suggest optimistic individuals who are able to look at the brighter side of life and maintain a positive attitude, even in the face of adversity.

2.3.4 Comparing Models of Emotional Intelligence

Despite the existence of three distinct models of emotional intelligence, there are theoretical and statistical similarities between the various conceptions. On a global level, all of the models aim to understand and measure the elements involved in the recognition and regulation of one's own emotions and the emotions of others (Goleman, 2001). All models agree that there are certain key components to emotional intelligence, and there is even some consensus on what those components are. For example, all three models of emotional intelligence implicate the awareness (or perception) of emotions and the management of emotions as being key elements in being an emotionally intelligent individual.

A relationship between elements of the models has been established through statistical analyses. As outlined in the descriptions of the measures of emotional intelligence, there is evidence that different measures of emotional intelligence

are related and may be measuring similar components. Brackett and Mayer (Brackett & Mayer, 2003) found significant similarities between the regulation of emotion subscale of the Mayer-Salovey-Caruso Emotional Intelligence Test and the interpersonal EQ scale of the Bar-On Emotion Quotient Inventory. Considerable similarities have been found between self-report measures of emotional intelligence. Brackett and Mayer (Brackett & Mayer, 2003) found that two self-report measures, the Emotion Quotient Inventory and the Self Report Emotional Intelligence Test, were highly correlated (r = .43). However, no relation between the two measures could be found when personality and positive well-being were controlled for, suggesting that while the two measures share variance, this variance may be attributable not to the measurement of emotional intelligence but to the measurement of other factors.

2.4   Emotional Intelligence and Related Constructs

2.4.1   *The impact of age, gender and ethnicity on the Bar-On model.*

Bar-On conducted an analysis of his North American normative sample to examine the effect of age, gender and ethnicity on EQ-i scores (Bar-On, 1997). Although the results indicated a few significant differences between the age groups that were compared, these differences are relatively small in magnitude. In brief, the older groups scored significantly higher than the younger groups on most of the EI scales; and respondents in their late 40s obtained the highest mean scores. An increase in emotional-social intelligence with age is also observed in children (Bar-On & Parker, 2000). Similar increases in EI with age have been reported by others based on employing the EQ-i, MEIS(9) and other measures of this construct (Goleman, 1998). These findings are interesting

27

when one considers that cognitive intelligence increases up until late adolescents and then begins to mildly decline in the second and third decades of life as was originally reported by Wechsler (Wechsler, 1958). The results suggest that as one gets older, one becomes more emotionally and socially intelligent.

2.4.2   Gender Differences in Emotional Intelligence

Competing evidence exists surrounding whether or not males and females differ significantly in general levels of emotional intelligence. Daniel Goleman (Goleman, 1998) asserts that no gender differences in EI exist, admitting that while men and women may have different profiles of strengths and weaknesses in different areas of emotional intelligence, their overall levels of EI are equivalent. However, studies by Mayer and Geher (1996), Mayer, Caruso, and Salovey (1999), and more recently Mandell and Pherwani (2003) have found that women are more likely to score higher on measures of emotional intelligence than men, both in professional and personal settings.

The discrepancy may be due to measurement choice. Brackett and Mayer (2003) found that females scored higher than males on EI when measured by a performance measure (the Mayer-Salovey-Caruso Emotional Intelligence Test). However, when using self-report measures such as the Bar-On Emotion Quotient Inventory (EQ-i) and the Self-Report Emotional Intelligence Test (SREIT), they found no evidence for gender differences. Perhaps gender differences exist in emotional intelligence only when one defines EI in a purely cognitive manner rather than through a mixed perspective. It could also be the

case that gender differences do exist but measurement artefacts such as over-estimation of ability on the part of males are more likely to occur with self-report measures. More research is required to determine whether or not gender differences do exist in emotional intelligence.

2.4.3 Everyday Emotional Intelligence

Several studies have found that emotional intelligence can have a significant impact on various elements of everyday living. Palmer, Donaldson, and Stough (2002) found that higher emotional intelligence was a predictor of life satisfaction.

Negative relationships have likewise been identified between emotional intelligence and problem behaviour. Mayer, Caruso, and Salovey (2000) found that lower emotional intelligence was associated with lower self-reports of violent and trouble-prone behaviour among college students, a correlation which remained significant even when the effects of intelligence and empathy were removed. Lower emotional intelligence (as measured by the MSCEIT) has been significantly associated with owning more self-help books (Brackett, et al., 2004), higher use of illegal drugs and alcohol, as well as increased participation in deviant behaviour (i.e. involvement in physical fights and vandalism). No gender differences were observed for these associations (Trinidad & Johnson, 2002; Brackett and Mayer, 2003). Finally, a study of 15 male adolescent sex offenders (15-17 years old) found that sex offenders have difficulty in identifying their own and others' feelings, two important elements of emotional intelligence (Moriarty, et al., 2001).

29

2.4.4 Emotional Intelligence and Leadership

One of the most applied constructs which emotional intelligence has been associated with is that of leadership. The leadership literature has produced countless theories outlining which characteristics compose the most effective leader, however, current academic research in the area describes two distinct types of leaders: transformational and transactional (Mandell & Pherwani, 2003). The transformational leader stimulates interest among colleagues, inspires a different outlook on the work, generates an awareness of the goals of the organization, develops others to higher levels of ability, and motivates others to consider the interests of the group over their own interests. Along these lines, transformational leadership is said to be comprised of the following four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass & Avolio, 1994). Alternatively, the transactional leader is one whom rewards (or disciplines) staff on the basis of their performance. They emphasize work standards, task completion, and employee compliance while relying heavily on organizational rewards and punishments to influence employee performance (Bass & Avolio, 1994).

Researchers investigating the effects of transformational and transactional leadership have found that transformational leadership predict higher ratings of effectiveness and satisfaction (Hater & Bass, 1988), higher group performance (Keller, 1995), and higher amount of effort on the part of subordinates (Seltzer & Bass, 1990) compared to transactional leadership. Researchers in the area of leadership have likewise proposed that effective transformational leaders must

possess social and emotional intelligence. These elements are considered critical to inspire employees and to build strong relationships. Research comparing emotional intelligence and transformational leadership has consistently found positive correlations between the two constructs. In a study examining transformational leadership and emotional intelligence in 32 individuals in management positions, Mandell and Pherwani (Mandell & Pherwani, 2003) found that level of emotional intelligence (as measured by the Bar-On Emotion Quotient Inventory) was significantly related to transformational leadership style (R = .50).

The foremost contributor to the area of emotional intelligence and leadership is Daniel Goleman, who has written several books on implementing emotional intelligence in an organization, including Working with Emotional Intelligence (Goleman, 1998) and The Emotionally Intelligence Workplace (Goleman & Chernis, 2001). Goleman posits that leaders high in emotional intelligence are key to organizational success; leaders must have the capacity to sense employees' feelings about their work environments, to intervene when problems arise, to manage their own emotions in order to gain the trust of the employees, and to understand the political and social conventions within an organization (Goleman, 2001). In addition, a leader has the capacity to impact organizational performance by setting a particular work climate. Goleman outlines six distinct leadership styles and how they affect the climate of the organization (Table 3 - Leadership Style and Impact on Organizational Climate (Goleman, 2001)). Each style is characterized by a number of the emotional intelligence competencies

outlined in Goleman's model, and each may be effective in an organizational setting, depending on the situation at hand.

LEADERSHIP STYLE						
	Coercive	Authoritative	Affiliative	Democratic	Pacesetting	Coach
When Appropriate	In a crisis, to kick-start turnaround, or with problem employees	When change requires a new vision, when clear direction needed	To heal rifts in a team or to motivate during stressful times	To build consensus or to get valuable input from employees	To get quick results from a highly motivated and competent team	To help an employee improve performance or develop long-term strengths
Objective	Immediate compliance	Mobilize others to follow a vision	Create harmony	Build commitment through participation	Perform tasks to a high standard	Build strengths for the future
Impact on Climate	Strongly negative	Most strongly positive	Highly positive	Highly positive	Highly negative	Highly positive
EI Competencies	Drive to achieve; initiative; emotional self control	Self-confidence; empathy; change catalyst	Empathy; building bonds; conflict management	Collaboration; team leadership; communication	Conscientious-ness; drive to achieve; initiative	Developing others; empathy; emotional self-awareness

Table 3 - Leadership Style and Impact on Organizational Climate

(Goleman, 2001)

Research has found that the most effective leaders integrate four or more of the six styles regularly, substituting one for another more appropriate style depending on the leadership situation. This has been found to be the case in studies of insurance companies, where leaders were adept at all four of the positive styles of leadership, and at schools, where heads of schools who used four or more of the leadership styles experienced superior performance among

students compared to comparison schools. Performance was poorest in those schools were only one or two styles of leadership were used (McBer, 2000).

2.5 Emotional Intelligence in the Workplace

As previously discussed, advanced emotional intelligence can be beneficial in many areas of life. However, the application of its usefulness has been most frequently documented in the professional workplace. Cherniss (2000) outlines four main reasons why the workplace would be a logical setting for evaluating and improving emotional intelligence competencies:

1. Emotional intelligence competencies are critical for success in most jobs.
2. Many adults enter the workforce without the competencies necessary to succeed or excel at their job.
3. Employers already have the established means and motivation for providing emotional intelligence training.
4. Most adults spend the majority of their waking hours at work.

A strong interest in the professional applications of emotional intelligence is apparent in the way organizations have embraced EI ideas. The American Society for Training and Development, for example, has published a volume describing guidelines for helping people in organizations cultivate emotional intelligence competencies which distinguish outstanding performers from average ones (Cherniss and Adler, 2000).

As previously noted, considerable research in the emotional intelligence field has focused on leadership, a fundamental workplace quality. Even before research in the area of EI had begun, the Ohio State Leadership Studies reported that leaders who were able to establish mutual trust, respect, and certain warmth and rapport with members of their group were more effective (Fleishman and Harris, 1962). This result is not surprising given that many researchers have argued that effective leadership fundamentally depends upon the leader's ability to solve the complex social problems which can arise in organizations (Mumford, et al., 2000).

The cost-effectiveness of emotional intelligence in the workplace has been an area of interest. Several studies have reported the economic value of hiring staff based on emotional intelligence. In a report to Congress, the Government Accounting Office (1998) outlined the amount saved when the United States Air Force used Bar On's Emotional Quotient Inventory (EQi) to select program recruiters. By selecting those individuals who scored highest in emotional intelligence as recruiters, they increased their ability to select successful recruiters by threefold and saved $3 million annually. A similar study by Boyatzis (1999) found that when partners in a multinational consulting firm were assessed on EI competencies, partners who scored above the median on nine or more competencies delivered $1.2 million more profit than did other partners.

Cherniss and Goleman (1998) estimated that by not following training guidelines established to increase emotional intelligence in the workplace, industry in the United States is losing between $5.6 and $16.8 billion a year.

34

They found that the impact of training employees in emotional and social competencies with programs which followed their guidelines was higher than for other programs, and by not implementing these programs companies were receiving less of an impact and consequently losing money.

2.5.1 Are Individuals with High EI More Successful?

Research on the predictive significance of EI over I.Q. was spurred by Goleman's initial publication on the topic which claimed that emotional intelligence could be "as powerful, and at times more powerful, than I.Q." (Goleman, 1995). Much of this claim was based on past research revealing that the predictive nature of I.Q. on job performance was not promising, with I.Q. accounting from 10-25% of the variance in job performance (Hunter & Hunter, 1984; Sternburg, 1996). The results of longitudinal studies further implicated emotional intelligence as being important. One study involving 450 boys reported that I.Q. had little relation to workplace and personal success; rather, more important in determining their success was their ability to handle frustration, control emotions, and get along with others (Snarey & Vaillant, 1985). Although this study did not attend to emotional intelligence directly, the elements which it addressed (the ability to regulate one's emotions and understand the emotions of others) are some of the central tenants of the emotional intelligence construct.

While research exists supporting the contention that emotional intelligence does contribute to individual cognitive-based performance over and above the level attributed to general intelligence (Lam & Kirby, 2002), current theories tend to

35

be more cautious regarding the incremental benefits of E.Q. over I.Q. Both Goleman (1998) and Mayer, Salovey and Caruso (Mayer, et al., 1998) emphasize that emotional intelligence by itself is probably not a strong predictor of job performance. Instead, it provides a foundation for emotional competencies which are strong predictors of job performance.

In later work, Goleman (2001) attempts to theoretically clarify the relationship between I.Q. and E.Q., and their respective applicability to job performance. He describes I.Q. as playing a sorting function, determining the types of jobs individuals are capable of holding. He theorizes that I.Q. is a strong predictor of what jobs individuals can enter as well as a strong predictor of success among the general population as a whole. For example, in order to become a medical doctor, an individual requires an above average I.Q. Emotional intelligence, on the other hand, is described by Goleman as a stronger predictor of who will excel in a particular job when levels of I.Q. are relatively equal. When the individuals are being compared to a narrow pool of people in a particular job in a certain organization, specifically in the higher levels, the predictive power of I.Q. for outstanding performance among them weakens greatly. In this circumstance, E.Q. would be the stronger predictor of individuals who outperform others. Thus, the doctors in a particular clinic would all have similarly above average I.Q.'s. Goleman would hypothesize that what would distinguish the most successful doctors from the others would be their levels of emotional intelligence.

2.6 Customer Service

2.6.1 What is the definition of customer service

Customer service means all features, acts and information that augment the customer's ability to realise the potential value of a core product or service, according to Davidow and Utal (1989). Langlois and Tocquer (1998) went another step deeper and defined customer service as a process that creates service quality for customers and there are two dimensions: technical quality and relational quality. Technical quality relates to the benefits offered to customers like interest rate on a vehicle purchase loan. Relational quality describes the nature of the interaction between customer and the company like the relationship between the customer and the service advisor. Do customers value technical quality or relational quality higher, Tschohl (1996) said that the definition of service is whatever your customers think it is. Once an organisation has spoken to it past, current and non customers to understand their definition of service, Tocquer and Cudennec (1998) say that once should define processes designed to create that particular customer experience.

2.6.2 The current problems facing customer service

More sophisticated customers are demanding better service in order to cope with more complex services and products. Thanks to global competition, they have little loyalty and plenty of alternatives. Many companies are concerned only with the tangibles of the products or service they provide, such as was the vehicle repaired correctly the first time and overlook the intangibles – reliability, responsiveness and empathy (Tschohl, 1996). A study conducted by Forum

Corporation, revealed that companies that change only tangible elements in their operations – elements that are "visible and easy to change" such as formal complaint systems – are unsuccessful in achieving lasting significant benefit from quality service (Whiteley & Hessan, 1996). Another issue that deters companies in providing exceptional customer service, is that many organisations believe that employees, were just born with the skills needed to provide quality service and with the desire to apply those skills (Tschohl, 1996).

Bluel (1990) complicates the issue further by noting that his experiences tell him that one can undo all those things that caused dissatisfaction and still not have a satisfied customer, suggesting that there is not a one-to-one correspondence between what is satisfying and what is dissatisfying.

2.6.3 Customer Service – The Competitive Advantage

William Band says that the battle for repeat business is critical to long-term success in today's intensely competitive marketplace. Customer service is not just a competitive edge, he goes on to say, but in many industries it is perhaps the competitive edge. (William Band, Coopers & Lybrand Consulting Group, Toronto, 2002). In critical times like now, customer service becomes the competitive advantage in every business (Davidow and Utal, 1989). If customer service is your competitive advantage then every interaction with a customer can enhance or damage the organisation reputation. These interactions are the place and time where service quality is delivered (Carlzon, 1987).

38

2.7 EQ and Customer Satisfaction

Walker (1995) pointed out that elements of a service encounter, including the physical surroundings, waiting time, and more importantly, the behaviour and performance of service providers, can influence the customers level of satisfaction. Barlow and Maul (2000), theorised that high emotional intelligence in service providers contributes to customer satisfaction. They posited that customer satisfaction related to a customers emotional experience during the service encounter, and that service providers with high emotional intelligence should be better able to create a positive emotional experience for customers.

Keynbach and Schutte (2005) also revealed that customers are more satisfied when they deal with service providers with high emotional intelligence. Their study supported the hypothesis that higher emotional intelligence of service providers leads to greater customer satisfaction. At 0.44, the effect size of the impact of service provider emotional intelligence was considerable. This finding was in accordance with the theoretical prediction made by Barlow and Maul (2000) that the ability of a service provider to accurately and effectively perceive, express, understand and regulate emotions in him or herself and others is a determinant of customer satisfaction. It also complements the findings of previous studies (Lemmink and Mattsson, 2002; Winsted, 2000) indicating that service provider qualities related to aspects of emotional intelligence are associated with customer satisfaction.

2.8 Summary

This chapter reviewed the literature pertinent to the disciplines of the research i.e. Emotional intelligence as a concept and its impact on work performance; Customer service and it's use by business as competitive advantage; and lastly the link between emotional intelligence and customer service.

The findings reconfirmed the relevance of the research problem and the research question. The next section of the research, will deal with the selection of the appropriate research methodology to test the research propositions developed from the research review.

3   RESEARCH HYPOTHESIS

3.1   Introduction

The literature review identifies the areas for investigation. These investigation areas are related to the ability of the current Mercedes-Benz satisfaction measurements, and their ability to measure the service advisors ability to perceive, express, understand and regulate emotions in himself and others as part of a means to ensure customer satisfaction.

3.2   Research Questions

The following research question needs to be investigated:

Does the Mercedes-Benz Customer Satisfaction Index measure the ability of a service advisor to accurately and effectively perceive, express, understand and regulate emotions in him or herself and others during the service experience?

3.3   Hypotheses

Based on the literature review, the following hypotheses are made:

3.3.1   Overall EQi and Service CSI

Hypothesis 1:   The null hypothesis states that there is no significant positive relationship between the emotional intelligence score and the service advisor customer satisfaction index.   The alternative hypothesis states that there is a significant positive relationship

between the emotional intelligence score and the service advisor customer satisfaction index.

H_0: $EQi_O = CSI_O$

H_A: $EQi_O <> CSI_O$

The above hypothesis is tested at a significance level of 5%.

3.3.2 EQi Scales and Service CSI

Hypothesis 2: The null hypothesis states that there is no significant positive relationship between the EQi Intrapersonal Scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Intrapersonal Scale score and the service advisor customer satisfaction index.

H_0: $EQi_{Intra} = CSI_O$

H_A: $EQi_{Intra} <> CSI_O$

The above hypothesis is tested at a significance level of 5%.

Hypothesis 3: The null hypothesis states that there is no significant positive relationship between the EQi Interpersonal scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Interpersonal scale score and the service advisor customer satisfaction index.

H_0: $EQi_{Inter} = CSI_O$

H_A: EQi$_{Inter}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 4: The null hypothesis states that there is no significant positive relationship between the EQi Adaptability scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Adaptability scale score and the service advisor customer satisfaction index.

H_0: EQi$_{Adap}$ = CSI_O

H_A: EQi$_{Adap}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 5: The null hypothesis states that there is no significant positive relationship between the EQi Stress Management scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Stress Management scale score and the service advisor customer satisfaction index.

H_0: EQi$_{StressMgnt}$ = CSI_O

H_A: EQi$_{StressMgnt}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 6: The null hypothesis states that there is no significant positive relationship between the EQi General Mood scale score and

the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi General Mood scale score and the service advisor customer satisfaction index.

H_0: $EQi_{GenMood} = CSI_O$

H_A: $EQi_{GenMood} <> CSI_O$

The above hypothesis is tested at a significance level of 5%.

3.3.3 EQi Sub Scales Service CSI

Hypothesis 7: The null hypothesis states that there is no significant positive relationship between the EQi Self Regard scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Self Regard scale score and the service advisor customer satisfaction index.

H_0: $EQi_{SelfRgrd} = CSI_O$

H_A: $EQi_{SelfRgrd} <> CSI_O$

The above hypothesis is tested at a significance level of 5%.

Hypothesis 8: The null hypothesis states that there is no significant positive relationship between the EQi Emotional Self Awareness scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive

relationship between the EQi Emotional Self Awareness scale score and the service advisor customer satisfaction index.

H_0: $EQi_{EmotSelfAware}$ = CSI_O

H_A: $EQi_{EmotSelfAware}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 9: The null hypothesis states that there is no significant positive relationship between the EQi Assertiveness scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Assertiveness scale score and the service advisor customer satisfaction index.

H_0: $EQi_{Assertive}$ = CSI_O

H_A: $EQi_{Assertive}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 10: The null hypothesis states that there is no significant positive relationship between the EQi Independence scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Independence scale score and the service advisor customer satisfaction index.

H_0: EQi_{Indep} = CSI_O

H_A: EQi_{Indep} <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 11: The null hypothesis states that there is no significant positive relationship between the EQi Self Actualisation scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Self Actualisation scale score and the service advisor customer satisfaction index.

H_0: EQi$_{SelfAct}$ = CSI_O

H_A: EQi$_{SelfAct}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 12: The null hypothesis states that there is no significant positive relationship between the EQi Empathy scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Empathy scale score and the service advisor customer satisfaction index.

H_0: EQi$_{Empathy}$ = CSI_O

H_A: EQi$_{Empathy}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 13: The null hypothesis states that there is no significant positive relationship between the EQi Social Responsibility scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive

46

relationship between the EQi Social Responsibility scale score and the service advisor customer satisfaction index.

H_0: $EQi_{SocResp} = CSI_O$

H_A: $EQi_{SocResp} <> CSI_O$

The above hypothesis is tested at a significance level of 5%.

Hypothesis 14: The null hypothesis states that there is no significant positive relationship between the EQi Interpersonal Relationship scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Interpersonal Relationship scale score and the service advisor customer satisfaction index.

H_0: $EQi_{InterpRelation} = CSI_O$

H_A: $EQi_{InterpRelation} <> CSI_O$

The above hypothesis is tested at a significance level of 5%.

Hypothesis 15: The null hypothesis states that there is no significant positive relationship between the EQi Reality Testing scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Reality Testing scale score and the service advisor customer satisfaction index.

H_0: $EQi_{RealTest} = CSI_O$

H_A: $EQi_{RealTest} <> CSI_O$

The above hypothesis is tested at a significance level of 5%.

Hypothesis 16: The null hypothesis states that there is no significant positive relationship between the EQi Flexibility scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Flexibility scale score and the service advisor customer satisfaction index.

H_0: EQi$_{Flex}$ = CSI_O

H_A: EQi$_{Flex}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 17: The null hypothesis states that there is no significant positive relationship between the EQi Problem Solving scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Problem Solving scale score and the service advisor customer satisfaction index.

H_0: EQi$_{ProbSol}$ = CSI_O

H_A: EQi$_{ProbSol}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 18: The null hypothesis states that there is no significant positive relationship between the EQi Stress Tolerance scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship

between the EQi Stress Tolerance scale score and the service advisor customer satisfaction index.

H_0: EQi$_{StressTol}$ = CSI_O

H_A: EQi$_{StressTol}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 19: The null hypothesis states that there is no significant positive relationship between the EQi Impulse Control scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Impulse Control scale score and the service advisor customer satisfaction index.

H_0: EQi$_{ImpCont}$ = CSI_O

H_A: EQi$_{ImpCont}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 20: The null hypothesis states that there is no significant positive relationship between the EQi Happiness scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant relationship positive between the EQi Happiness scale score and the service advisor customer satisfaction index.

H_0: EQi$_{Happiness}$ = CSI_O

H_A: EQi$_{Happiness}$ <> CSI_O

The above hypothesis is tested at a significance level of 5%.

Hypothesis 21: The null hypothesis states that there is no significant positive relationship between the EQi Optimism scale score and the service advisor customer satisfaction index. The alternative hypothesis states that there is a significant positive relationship between the EQi Optimism scale score and the service advisor customer satisfaction index.

H_0: $EQi_{Optimism} = CSI_O$

H_A: $EQi_{Optimism} <> CSI_O$

The above hypothesis is tested at a significance level of 5%.

3.4 Summary

The chapter set out the research question and defined the hypothesis required to test the research question.

4 RESEARCH METHODOLOGY

4.1 Introduction

This chapter covers the research method adopted to test the hypotheses in Chapter 3. It includes the approach taken to identify the appropriate population, the sampling method used, the data collection process and the approach taken to the data analysis. It also details limitations of the research method as well as some issues around data integrity.

Durrheim and TerreBlanche (1999) describe the research process in terms of four main stages. The purpose of this chapter is to cover stage 3.
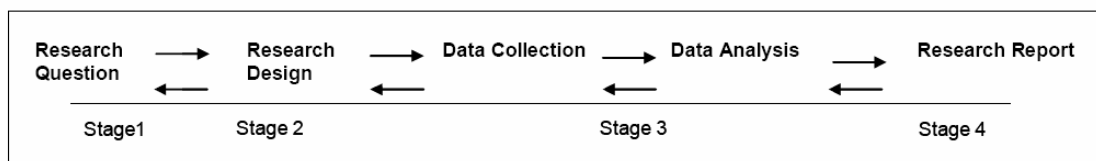
Source: Durrheim and TerreBlanche (1999)

Figure 4 - The Research Process

4.2 Research Design

This quantitative descriptive research study was designed around the use of secondary data. Customer satisfaction data for Mercedes-Benz service advisors was obtained from Synovate South Africa. Emotional Intelligence data was obtained by asking certain service advisors to complete a Bar-On EQi test.

The research was designed to measure if differences in customer satisfaction results resulted in corresponding movements in emotional intelligence. A rigorous approach to identifying the service advisors who were able to qualify for the survey was defined and applied. The candidates results were then compared using regression techniques.

The research was well suited to a quantitative approach as half of the data already existed and the rest could be easily obtained, also the analysis was done using established techniques (Cresswell, 1994).

4.3 Unit of Analysis

The unit of analysis was an individual service advisor customer satisfaction results for the 12 month period June 2006 to May 2007.

Each service advisors customer satisfaction score had the following additional characteristics: 6 or more months of customer satisfaction results for the 12 month period

4.4 Population

The population of relevance was all Mercedes-Benz service advisors in South Africa that had service satisfaction scores for the period analysed.

4.5 Sampling Method and Size

While the population defined above is quite broad, the availability of data and the data analysis requirements meant that a stratified sampling method had to be employed.

4.5.1 Initial Sample

The data population was drawn from the service satisfaction data received from Synovate. From this dataset, all available data points that met the following criteria were used:

1. The service advisors had to have a minimum of 6 or more months of customer satisfaction results for the 12 month period.

There were 190 or 40.6% service advisors that could now be used for stratified sampling, out of a population of 468 service advisors.

4.5.2 Sample Contact Details

The database of 190 service advisors that qualified for survey, did not have the personal details of the service advisors i.e. names or contact details, the list only had a unique code for the service advisors. The next step was thus to first obtain these details before the research could continue. The steps taken were as follows:

- Firstly identify the dealership to which the service advisor belonged; then send an email to the Dealer Principal explaining the purpose of the research requesting permission for some of his/her staff to be surveyed;

- Following on from this the name and email address of the service advisor linked to the unique code for the dealership was requested (Appendix 3: Letter to Mercedes-Benz Dealer Principals).

Most of the dealerships responded to the requests with the information required. Where the information was not obtained it was either because the service advisor had left the employment of the dealership or due to non response by the dealership.

There were 126 or 26.9% service advisors that could now be used for stratified sampling, out of a population of 468 service advisors.

4.6 Data Collection Process

The data collection process took place over a number of stages. The first sage was concerned with obtaining the customer satisfaction data for the service advisors. The second stage was concerned surveying the service advisors on their respective emotional intelligences.

4.6.1 Obtaining Customer Satisfaction Data

Synovate South Africa, the research company that does customer satisfaction research for DaimlerChrysler South Africa, was approached to provide customer satisfaction results for Mercedes-Benz Service advisors. Synovate was able to provide data per service advisor per month per question for the period June 2006 to May 2007.

196848 customer service records were received from Synovate. These records were all service transactions for the period. Not all of these transactions were surveyed for satisfaction (Table 4 - Mercedes-Benz Service Transactions and Surveys - June 2006 to May 2007).

Month	# CSI Surveys	# Service Transactions
20060601	1844	14808
20060701	1707	13852
20060801	2214	15275
20060901	1760	13446
20061001	1924	13226
20061101	1848	18626
20061201	1373	14521
20070101	1657	18650
20070201	1720	18955
20070301	1732	20426
20070401	1696	17703
20070501	1812	17360
Total	**21287**	**196848**

Table 4 - Mercedes-Benz Service Transactions and Surveys - June 2006 to May 2007

These surveyed results where then summarised by Service advisor and by month (Table 5 - Sample of Service Advisor CSI Data).

Service Advisor	20060601	20060701	20060801	20060901	20061001
700003-2				46.1	69.4
700003-3					
700003-6	88.6	100.0			
700003-7	76.7	93.4	88.7	86.5	91.8
700004-1	59.1	69.4	76.4	74.1	49.1
700004-2	75.3	82.0	80.7	70.6	62.7

Table 5 - Sample of Service Advisor CSI Data

These results were then averaged for the period, June 2006 to May 2007, to get an overall result per service advisor.

4.6.2 Obtaining Emotional Intelligence Scores

The 126 Service Advisors, who's Dealer Principals had responded with their contact details, were sent emails requesting that they complete the online Bar-On EQi survey (Appendix 4: Letter to Mercedes-Benz Service Advisors).

There were 51 or 10.9% of service advisors that filled in the EQi online emotional intelligence tests.

Of the 51 responses 4 results could not be used as either the respondents had not filled in their names, or had filled in their South African ID numbers as names. There were thus 47 or 10% of the service advisors EQi online emotional intelligence results that could be used for the research (Table 6 - EQi Survey Responses by Dealership).

Dealership	# Service Advisors
Cargo M2 City	4
Cargo Motors Klerksdorp	1
Cargo Motors Potchefstroom	2
Cargo Motors Springs	1
Century Motors Carletonville	1
Eikestad Motors	1
Eurocar Kokstad	1
Garden City Motors Ladysmith	1
Inyanga Motors Empangeni	1
Inyanga Motors Vryheid	1

John Williams Motors Bloemfontein	1
Mercedes-Benz Century City	3
Mercedes-Benz Claremont	2
Mercedes-Benz Constantia Kloof	2
Mercedes-Benz Durban	2
Mercedes-Benz Hatfield	1
Mercedes-Benz Northcliff	1
Mercedes-Benz Rosebank	1
Mercedes-Benz Sandton	1
Mercedes-Benz Service Centre Strijdom Park	1
Mercedes-Benz Umhlanga	2
Naledi Motors Gaborone	1
New Vaal Motors Vereeniging	1
NMI-DSM Pinetown	4
Noordwes Motors Lichtenburg	1
Rola Motors Strand	1
Ronnies Motors West Bank	1
Stucky Motors Newcastle	2
Stucky Motors Volksrust	1
Union Motors Nelspruit	1
United Motors Bethal	2
Zelco Motors Upington	1
Grand Total	**47**

Table 6 - EQi Survey Responses by Dealership

A further 2 samples were removed before analysis was done on the data. The samples have an inconsistency index higher than 12 which according to the EQI Technical Manual (Bar-On, 2002) should be removed.

4.7 Reliability and Validity

4.7.1 Mercedes-Benz Customer Satisfaction

Mercedes-Benz customer satisfaction index was introduced to provide dealers with a management tool to improve customer satisfaction with key sales and after-sales processes and stimulate customer loyalty, measure dealer performance in meeting Customer Expectations and ultimately to support

57

DaimlerChrysler South Africa in their effort to retain existing customers and to increase their market share and profitability (Joyce, 2007).

4.7.1.1 Expectation Research

Synovate conducts an expectation research process that identifies what are the correct questions to ask customer and also what the weightings for each question should then be. The expectation research process is set out with the following objectives and outcomes (Figure 5 - The Outcomes of the CSI Expectation Research Process) in mind (Joyce, 2007).:

- Create a scientifically designed CSI questionnaire

- Establish the 'moments of truth' in the sales and service transaction

- Identify those aspects of service most important to customers

- Determine the relative importance of each aspect of service

- Highlight the key 'drivers' of customer satisfaction

- Derive a questionnaire for ongoing tracking of performance

- Establish individual question weights for ongoing tracking and indexing
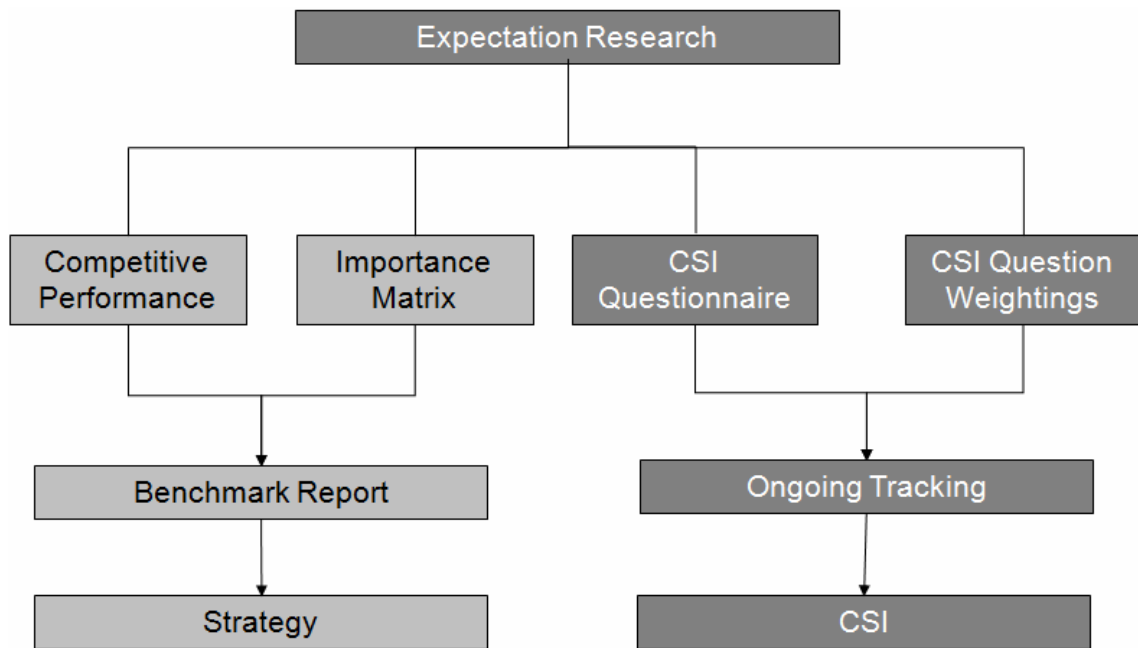
Figure 5 - The Outcomes of the CSI Expectation Research Process

4.7.1.2 CSI Sampling

The principles that govern the Mercedes-Benz CSI sampling are as follows:

- Each dealer will have their own Individual sales and service samples

- Samples relative to service throughput

- Apply three month rolling average, (but not for the purposes of this research)

- Establish required precision levels

- Random sampling off customer lists

4.7.1.3 Sample Validity

This sample will allow DaimlerChrysler South Africa to track the performance of the individual brands at a national and a territory level. It will also allow DaimlerChrysler to get data that would be required by Dealers to manage CSI

at individual outlet and individual Salesperson / Service Advisor levels (Joyce 2007).

This validity is affected by the sample achieved and this is dependant on two main factors:

- The number of submissions received.

- The number of submissions that are usable for fieldwork purposes

4.7.2 Bar-On Emotion Quotient Inventory

The Emotion Quotient Inventory (EQ-I) was normed on approximately 4000 respondents from the United States and Canada. Earlier versions of the Emotion Quotient Inventory (which relied on 12 sub-scales rather than the current 15) were normed internationally. These norms are presented in the technical manual for use with non-North American participants. The majority of the North American normative sample were white (79%) and under the age of 30 years, with equal representation of males and females (Bar-On, 2002). Stability estimates of the Emotion Quotient Inventory (in the form of test-retest reliability after 1 and 4 months, respectively) were reported as .85 (N = 44) and .75 (N = 27). It should be noted that no stability estimates were reported for the North American sample; these figures reflect the South African sample. Based on seven population samples, the authors report internal consistency (in the form of Cronbach's alpha) as ranging from .69 to .86 for the 15 subscales and an overall average internal consistency of .76 (Bar-On, 2002).

The Bar-On Emotion Quotient Inventory is a complete test in that it can classify each respondent within the range of EQ scores and can be used in a multitude of settings and situations, including corporate, educational, clinical, medical, research, and preventative settings. Content validity is reported by the authors as being adequate in that items for each sub-component were generated and selected in a systematic approach. Additionally, item analyses were conducted in an effort to extract items unrelated to the definitions, and feedback was provided by subjects who were interviewed in the early stages of test development. Structural validity was established through factor analysis to test the hierarchical structure of Bar-On's model of emotional intelligence. Analyses supported the five components of emotional intelligence (GFI = .971), however, exploratory factor analyses found support for a 13-factor model of sub-components rather than Bar-On's proposed 15 factor model (Bar-On, 2002).

Measures of criterion validity found that emotional intelligence as measured with the Emotion Quotient Inventory could accurately differentiate between those who were successful and those who were unsuccessful in business and industry settings. It could also differentiate between those with high or low self-perceived success in military school, between those U.S. Air Force Recruiters who were the most successful in their work, and between academically successful and unsuccessful university students. Likewise, those individuals who were suspected to intuitively have higher levels of emotional intelligence (i.e. psychologists) were found to have Emotion Quotient Inventory scores significantly higher than the mean (Bar-On, 2002; Handley, 1997; Swart, 1996).

61

Construct validity was illustrated through measures of convergent and divergent validity. No significant correlations were found between the Emotion Quotient Inventory and several measures of standard intelligence (Bar-On, 2002; Brackett & Mayer, 2003), although the Emotion Quotient Inventory has been found to be significantly correlated to measures of psychological and subjective well-being (r = .54 and r = .35) and to all of the Big Five personality factors as measured by the NEO-PI-R (r's = .16 to -.57; Brackett & Mayer, 2003). Likewise, research has found that the Total EQ scale was positively correlated with three of the best indicators of emotional functioning in a measure of personality, with acculturation (r = .34), and with sense of competence (r = .51), while being negatively correlated with other indicators of abnormal emotional functioning (Bar-On, 2002).

Comparisons with other measures of emotional intelligence indicated that the Emotion Quotient Inventory correlates only minimally with the Mayer-Salovey-Caruso Emotional Intelligence Test (r = .21) but more significantly with another self-report measure of emotional intelligence, the Self Report Emotional Intelligence Test (Schutte et al., 1998). Tests of incremental validity of the Emotion Quotient Inventory found that when personality and intelligence (IQ) were held constant, emotional intelligence as measured by the Emotion Quotient Inventory was still predictive of alcohol use (Brackett & Mayer, 2003).

4.8   Potential Limitations

The potential limitations related to this research work are:

- The sample size would limit meaningful statistical analysis on a individual dealership level, which could provide a component that shows the level of leadership in the dealerships.

4.9   Summary

Based on the theoretical discussion in the previous chapters, the research method employed to obtain data and evaluate the research question was discussed.

63

5 RESULTS

5.1 Introduction

This Chapter presents the analysis of the data collected for the research. As detailed in the previous chapter, primary data was gathered from online emotional intelligence surveys and secondary CSI data from Synovate the company that provides customer satisfaction research for Mercedes-Benz. The survey participants were selected through stratified sampling. This is a non-probability sampling design for gathering data from persons conveniently accessible to the researcher.

The collected raw data was categorised, crossed tabulated and analysed in order to identify patterns and relationships. The statistical analysis was facilitated by the use of NCSS, a statistical software program.

Section 5.2 describes the data and section 5.3 shows the results of the regression techniques employed to measure the research hypotheses to understand if there is any evidence of EQ in the CSI results. Finally Section 5.3 sets out the conclusions of the Chapter.

5.2 Descriptive Statistics

5.2.1 CSI

The CSI results have a mean of 85.244. The Shapiro-Wilk normality test rejects normality. Skewness measures the direction and lack of symmetry and show a result of -.98 indicating a long tail to the left. Kurtosis measures the heaviness of

the tails, the result is 5.43, more than 3 indicating heavier tails than a normal distribution.

Summary Section of CSI

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	85.24464	3.106876	0.4683793	73.9156	90.81482	16.89922

Skewness and Kurtosis Section of CSI

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.9825786	5.435503	-1.017604	2.886585	3.644659E-02	2.674829E-02
Std Error	0.5264657	1.298865			5.880884E-03	

Normality Test Section of CSI

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9384903	2.085146E-02			Reject normality
Anderson-Darling	0.5294335	0.1764778			Can't reject normality
Martinez-Iglewicz	1.23619		1.105365	1.161866	Reject normality
Kolmogorov-Smirnov	0.1079858		0.121	0.132	Can't reject normality
D'Agostino Skewness	-2.663359	7.736487E-03	1.645	1.960	Reject normality
D'Agostino Kurtosis	2.5883	0.009646	1.645	1.960	Reject normality
D'Agostino Omnibus	13.7927	0.001011	4.605	5.991	Reject normality

Plots Section of CSI

Table 7 - CSI Descriptive Statistics

5.2.2 EQI Overall

The EQI Overall results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 105.22. The Shapiro-Wilk normality cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.33 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 3.03, almost equal to 3 indicating tails are not lighter or heavier than a normal distribution.

65

	CSI
CSI	1.000
TOTAL_EQ	0.036

Table 8 - CSI Overall and EQi Correlations

Summary Section of TOTAL_EQ

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	105.2273	14.25819	2.149503	64	130	66

Skewness and Kurtosis Section of TOTAL_EQ

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.3307732	3.038772	-0.342564	0.1933937	0.135499	0.1124286
Std Error	0.3524472	0.6496529			1.544849E-02	

Normality Test Section of TOTAL_EQ

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9710364	0.3290963			Can't reject normality
Anderson-Darling	0.3599309	0.4487794			Can't reject normality
Martinez-Iglewicz	0.9891549		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	9.759251E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.9928963	0.3207605	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	0.5028	0.615087	1.645	1.960	Can't reject normality
D'Agostino Omnibus	1.2387	0.538300	4.605	5.991	Can't reject normality

Plots Section of TOTAL_EQ
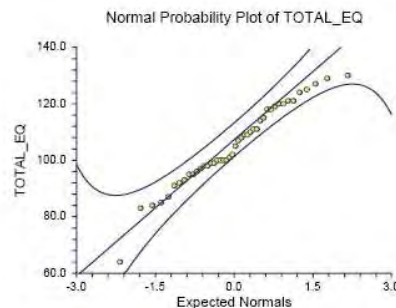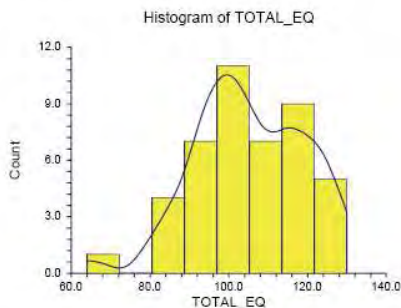
Table 9 – Total EQ Descriptive Statistics

5.2.3 EQi Scales

5.2.3.1 EQI Intrapersonal

The EQI Intrapersonal results shows very low positive correlation, 0.071, to the CSI results for the sample. The results have a mean of 104.02. The Shapiro-

Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.30 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.46, less than 3 indicating lighter tails than a normal distribution.
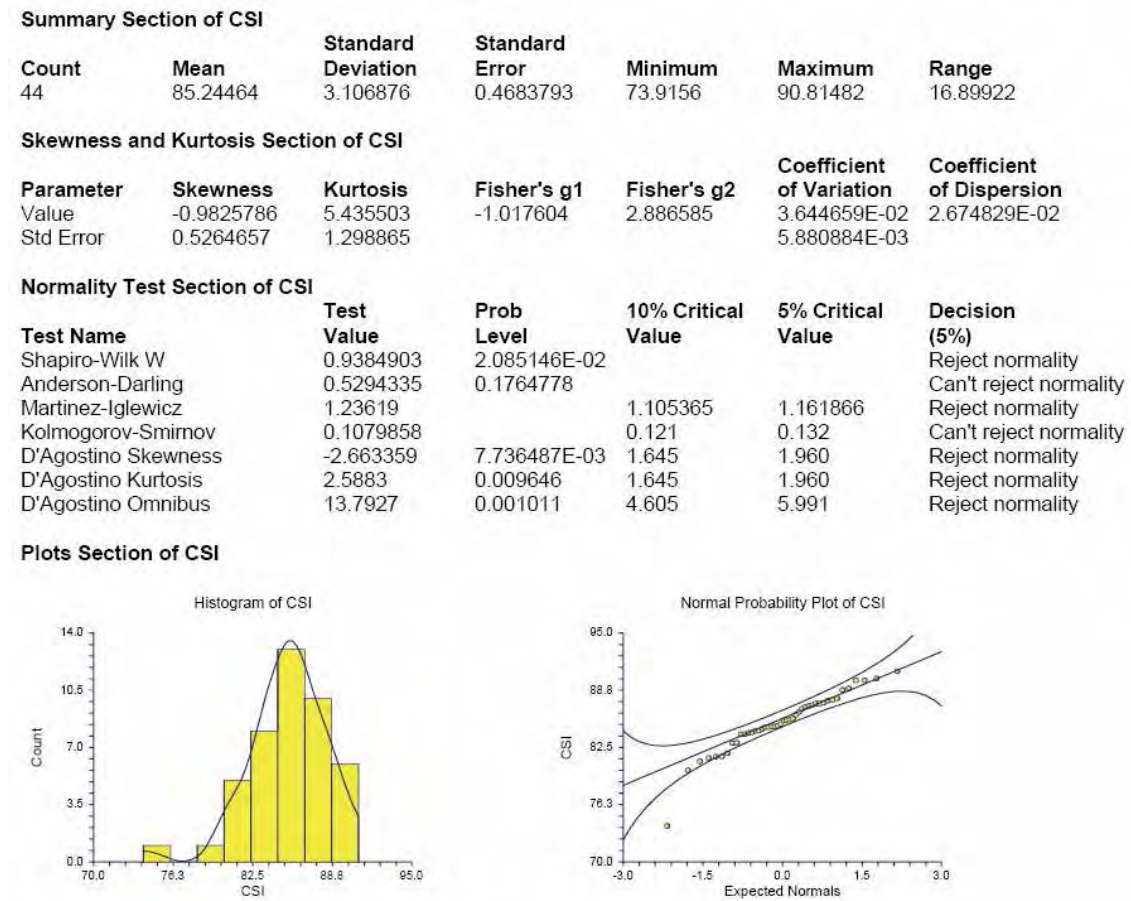
	CSI
CSI	1.000
GENERAL_MOOD	0.148
INTRAPERSONAL	0.071
ASSERTIVENESS	0.066
INTERPERSONAL	0.037
ADAPTABILITY	0.036
STRESS_MANAGEMENT	-0.073

Table 10 - CSI and EQi Scale Correlations

Summary Section of INTRAPERSONAL

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	104.0227	12.70504	1.915357	71	124	53

Skewness and Kurtosis Section of INTRAPERSONAL

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.3003325	2.460375	-0.3110381	-0.4565477	0.1221372	9.880495E-02
Std Error	0.2785687	0.4682007			1.187501E-02	

Normality Test Section of INTRAPERSONAL

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9684427	0.2663366			Can't reject normality
Anderson-Darling	0.3585023	0.4521713			Can't reject normality
Martinez-Iglewicz	0.9879953		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.0699114		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.9041142	0.3659348	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-0.6125	0.540236	1.645	1.960	Can't reject normality
D'Agostino Omnibus	1.1925	0.550866	4.605	5.991	Can't reject normality

Plots Section of INTRAPERSONAL

Histogram of INTRAPERSONAL

Normal Probability Plot of INTRAPERSONAL

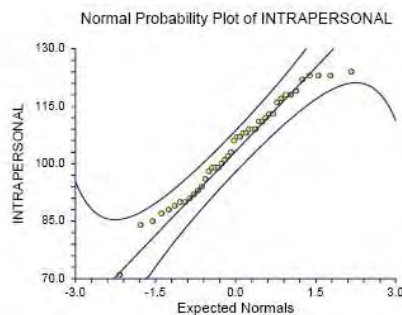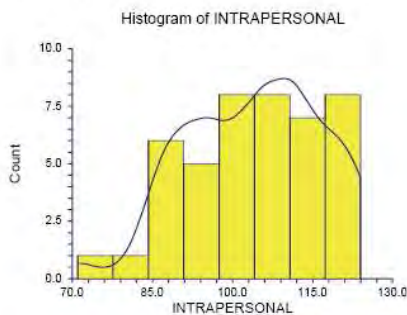**Table 11 – EQI Intrapersonal Descriptive Statistics**

5.2.3.2 EQI Interpersonal

The EQI Interpersonal results shows very low positive correlation, 0.037, to the CSI results for the sample. The results have a mean of 105.27. The Shapiro-Wilk normality test rejects normality. Skewness measures the direction and lack of symmetry and show a result of -0.76 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.72, less than 3 indicating lighter tails than a normal distribution.

Summary Section of INTERPERSONAL_RELATIONSHIP

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	105.2727	14.98428	2.258965	69	126	57

Skewness and Kurtosis Section of INTERPERSONAL_RELATIONSHIP

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.7659734	2.727055	-0.7932772	-0.1568813	0.1423377	0.1102694
Std Error	0.2291203	0.5661144			1.604845E-02	

Normality Test Section of INTERPERSONAL_RELATIONSHIP

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9248202	6.92309E-03			Reject normality
Anderson-Darling	0.999092	1.238152E-02			Reject normality
Martinez-Iglewicz	1.043292		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.1033959		0.121	0.132	Can't reject normality
D'Agostino Skewness	-2.160973	3.069743E-02	1.645	1.960	Reject normality
D'Agostino Kurtosis	-0.0320	0.974433	1.645	1.960	Can't reject normality
D'Agostino Omnibus	4.6708	0.096770	4.605	5.991	Can't reject normality

Plots Section of INTERPERSONAL_RELATIONSHIP

Table 12 – EQI Interpersonal Relationship Decriptive Statistics

5.2.3.3 EQI Adaptability

The EQI Adaptability results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 104.38. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.16 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.32, less than 3 indicating lighter tails than a normal distribution.

Summary Section of ADAPTABILITY

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	104.3864	14.85937	2.240134	68	129	61

Skewness and Kurtosis Section of ADAPTABILITY

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.1620896	2.324874	-0.1678674	-0.6088087	0.1423497	0.1203991
Std Error	0.2584679	0.3630615			1.312103E-02	

Normality Test Section of ADAPTABILITY

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9723352	0.3649299			Can't reject normality
Anderson-Darling	0.3584047	0.4524039			Can't reject normality
Martinez-Iglewicz	0.9626594		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	7.332504E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.4927684	0.6221762	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-0.9696	0.332233	1.645	1.960	Can't reject normality
D'Agostino Omnibus	1.1830	0.553498	4.605	5.991	Can't reject normality

Plots Section of ADAPTABILITY
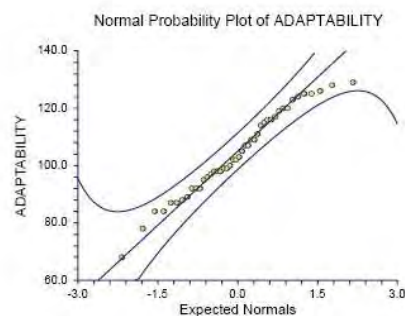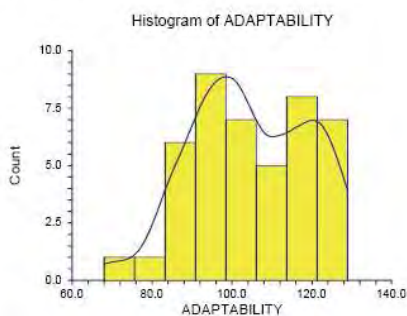
Table 13 – EQI Adaptability Descriptive Statistics

5.2.3.4 EQI Stress Management

The EQI Stress Management results shows very low negative correlation, -0.073, to the CSI results for the sample. The results have a mean of 104.15. The Shapiro-Wilk normality test cannot reject normality, however the D'Agostino Skewness normality test rejects normaility. Skewness measures the direction and lack of symmetry and show a result of -0.06 indicating a slight long tail to the left. Kurtosis measures the heaviness of the tails, the result is 1.89, less than 3 indicating lighter tails than a normal distribution.

Summary Section of STRESS_MANAGEMENT

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	104.1591	12.46753	1.87955	83	129	46

Skewness and Kurtosis Section of STRESS_MANAGEMENT

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	0.0619427	1.894788	0.0641507	-1.092094	0.119697	0.1024913
Std Error	0.2236497	0.2052786			8.661015E-03	

Normality Test Section of STRESS_MANAGEMENT

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9616696	0.1502267			Can't reject normality
Anderson-Darling	0.5186387	0.1877291			Can't reject normality
Martinez-Iglewicz	0.9447853		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.1034538		0.121	0.132	Can't reject normality
D'Agostino Skewness	0.1889817	0.8501071	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-2.5872	0.009675	1.645	1.960	Reject normality
D'Agostino Omnibus	6.7294	0.034572	4.605	5.991	Reject normality

Plots Section of STRESS_MANAGEMENT
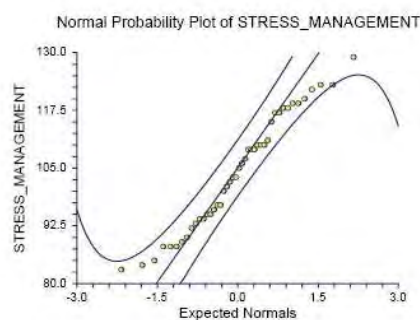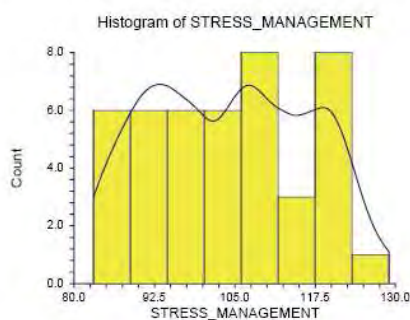
Table 14 – EQI Stress Management Descriptive Statistics

5.2.3.5 EQI General Mood

The EQI General Mood results show very low positive correlation, although the highest of the EQI scales, 0.148, to the CSI results for the sample. The results have a mean of 103.47. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.34 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.84, less than 3 indicating lighter tails than a normal distribution.

Summary Section of GENERAL_MOOD

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	103.4773	12.23888	1.84508	70	124	54

Skewness and Kurtosis Section of GENERAL_MOOD

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.3454934	2.844897	-0.3578088	-2.446238E-02	0.118276	9.462412E-02
Std Error	0.3049103	0.542975			1.279962E-02	

Normality Test Section of GENERAL_MOOD

| Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9762905	0.4925135			Can't reject normality
Anderson-Darling	0.2546454	0.7293236			Can't reject normality
Martinez-Iglewicz	1.00009		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	5.446394E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-1.035554	0.3004101	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	0.1852	0.853095	1.645	1.960	Can't reject normality
D'Agostino Omnibus	1.1067	0.575031	4.605	5.991	Can't reject normality

Plots Section of GENERAL_MOOD
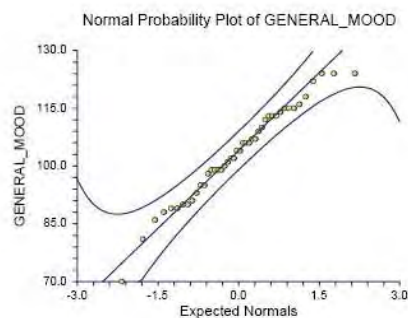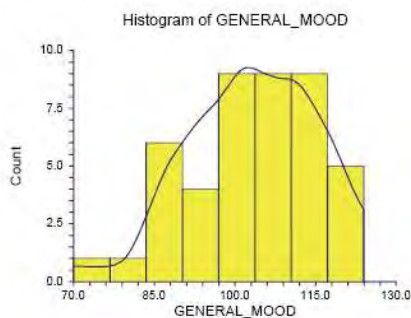
Table 15 – EQI General Mood Descriptive Statistics

5.2.4 EQi Sub Scales

5.2.4.1 EQI Self Regard

The EQI Self Regard results shows very low positive correlation, 0.15, to the CSI results for the sample. The results have a mean of 106.20. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.44 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 3.04, indicating tails almost equal to a normal distribution.

	CSI
CSI	1.000
INTERPERSONAL_RELATIONSHIP	0.194
EMOTIONAL_SELF_AWARENESS	0.185
SELF_REGARD	0.150
HAPPINESS	0.138
OPTIMISM	0.122
PROBLEM_SOLVING	0.089
REALITY_TESTING	0.070
ASSERTIVENESS	0.066
SELF_ACTUALIZATION	-0.015
STRESS_TOLERANCE	-0.041
FLEXIBILITY	-0.070
IMPULSE_CONTROL	-0.073
EMPATHY	-0.096
INDEPENDENCE	-0.109
SOCIAL_RESPONSIBILITY	-0.111

Table 16 - CSI and EQi Sub Scale Correlations

Summary Section of SELF_REGARD

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	106.2045	10.19936	1.537611	76	124	48

Skewness and Kurtosis Section of SELF_REGARD

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.4467274	3.04282	-0.4626514	0.1979424	9.603506E-02	7.928118E-02
Std Error	0.3754454	0.6990848			1.085479E-02	

Normality Test Section of SELF_REGARD

| Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9583066	0.1124764			Can't reject normality
Anderson-Darling	0.6288415	0.1013677			Can't reject normality
Martinez-Iglewicz	1.024711		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.10142		0.121	0.132	Can't reject normality
D'Agostino Skewness	-1.323609	0.1856329	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	0.5090	0.610752	1.645	1.960	Can't reject normality
D'Agostino Omnibus	2.0110	0.365858	4.605	5.991	Can't reject normality

Plots Section of SELF_REGARD
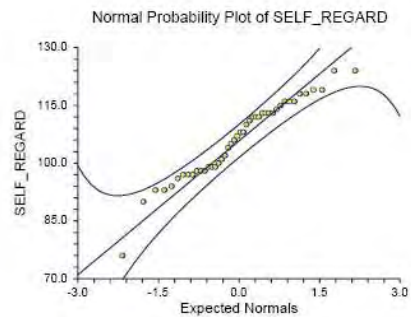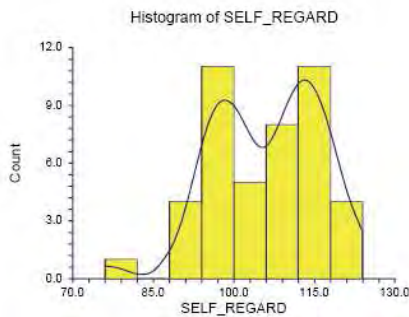
Table 17 – EQI Self Regard Descriptive Statistics

74

5.2.4.2 EQI Emotional Self-Awareness

The EQI Emotional Self-Awareness results shows very low positive correlation, 0.185, to the CSI results for the sample. The results have a mean of 105.15. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.23 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.17, less than 3 indicating lighter tails than a normal distribution.

Summary Section of EMOTIONAL_SELF_AWARENESS

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	105.1591	12.45446	1.877581	77	127	50

Skewness and Kurtosis Section of EMOTIONAL_SELF_AWARENESS

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.2319341	2.171806	-0.2402016	-0.7808107	0.1184345	0.1028139
Std Error	0.2481558	0.2423304			1.031583E-02	

Normality Test Section of EMOTIONAL_SELF_AWARENESS

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9582051	0.1114966			Can't reject normality
Anderson-Darling	0.7103119	6.379462E-02			Can't reject normality
Martinez-Iglewicz	0.9540049		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	9.914716E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.7020903	0.4826228	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-1.4432	0.148971	1.645	1.960	Can't reject normality
D'Agostino Omnibus	2.5757	0.275865	4.605	5.991	Can't reject normality

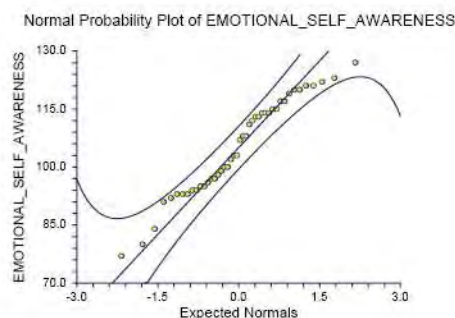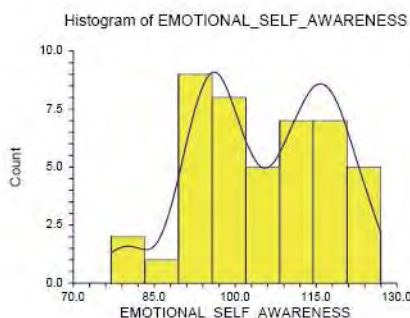Plots Section of EMOTIONAL_SELF_AWARENESS

Table 18 – EQI Emotional Self Awareness Descriptive Statistics

75

5.2.4.3 EQI Assertiveness

The EQI Assertiveness results shows very low positive correlation, 0.066, to the CSI results for the sample. The results have a mean of 101.65. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.12 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 1.93, less than 3 indicating lighter tails than a normal distribution.

Summary Section of ASSERTIVENESS

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	101.6591	15.77302	2.377872	70	128	58

Skewness and Kurtosis Section of ASSERTIVENESS

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.1244068	1.934501	-0.1288414	-1.047468	0.155156	0.1284879
Std Error	0.215387	0.2335357			1.229364E-02	

Normality Test Section of ASSERTIVENESS

| Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9573209	0.1033098			Can't reject normality
Anderson-Darling	0.5827295	0.1294564			Can't reject normality
Martinez-Iglewicz	0.9540374		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.1191079		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.3788531	0.7047969	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-2.3924	0.016738	1.645	1.960	Reject normality
D'Agostino Omnibus	5.8672	0.053206	4.605	5.991	Can't reject normality

Plots Section of ASSERTIVENESS
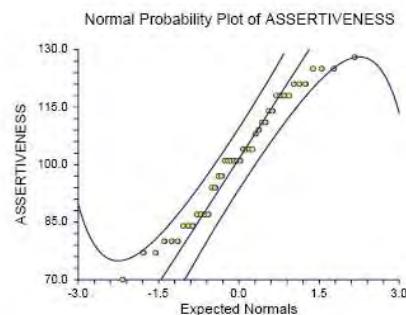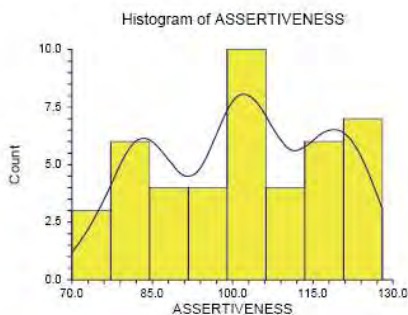
Table 19 – EQI Assertiveness Descriptive Statistics

5.2.4.4 EQI Independence

The EQI Independence results shows very low negative correlation, -0.109, to the CSI results for the sample. The results have a mean of 103.70. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.15 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.24, less than 3 indicating lighter tails than a normal distribution.

Summary Section of INDEPENDENCE

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	103.7045	13.13894	1.980769	77	128	51

Skewness and Kurtosis Section of INDEPENDENCE

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.1531072	2.243953	-0.1585649	-0.6997398	0.1266958	0.1022194
Std Error	0.2214971	0.272458			1.123261E-02	

Normality Test Section of INDEPENDENCE

| Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.968793	0.2741513			Can't reject normality
Anderson-Darling	0.5034918	0.2046249			Can't reject normality
Martinez-Iglewicz	0.9614111		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.1054107		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.4656682	0.641453	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-1.2093	0.226528	1.645	1.960	Can't reject normality
D'Agostino Omnibus	1.6794	0.431846	4.605	5.991	Can't reject normality

Plots Section of INDEPENDENCE
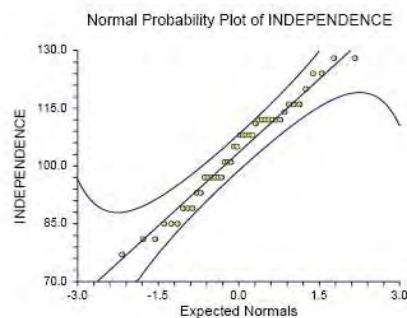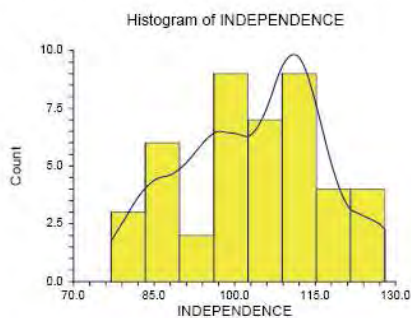
Table 20 – EQI Independance Descriptive Statistics

5.2.4.5 EQI Self-Actualisation

The EQI Self-Actualisation results shows very low negative correlation, -0.015, to the CSI results for the sample. The results have a mean of 97.90. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.32 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.24, less than 3 indicating lighter tails than a normal distribution.

Summary Section of SELF_ACTUALIZATION

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	97.90909	14.78972	2.229634	63	124	61

Skewness and Kurtosis Section of SELF_ACTUALIZATION

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.3242278	2.24562	-0.3357852	-0.6978664	0.1510556	0.1176471
Std Error	0.2475011	0.3729942			1.407702E-02	

Normality Test Section of SELF_ACTUALIZATION

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9646471	0.1937064			Can't reject normality
Anderson-Darling	0.6142675	0.1101254			Can't reject normality
Martinez-Iglewicz	0.9807594		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.1089583		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.9738697	0.3301212	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-1.2042	0.228519	1.645	1.960	Can't reject normality
D'Agostino Omnibus	2.3985	0.301423	4.605	5.991	Can't reject normality

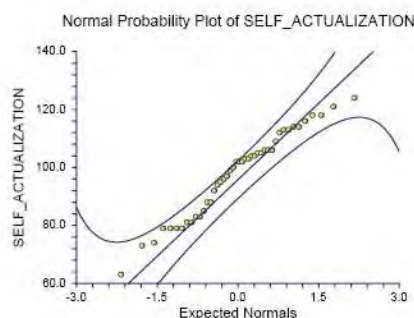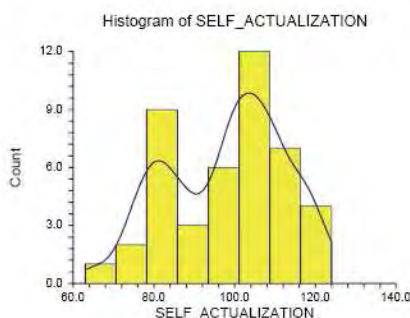**Plots Section of SELF_ACTUALIZATION**

Table 21 – EQI Self Acualisation Descriptive Statistics

5.2.4.6 EQI Empathy

The EQI Empathy results shows very low positive correlation, 0.096, to the CSI results for the sample. The results have a mean of 102.99. The Shapiro-Wilk normality test rejects normality. Skewness measures the direction and lack of symmetry and show a result of -0.38 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 1.89, less than 3 indicating lighter tails than a normal distribution.

Summary Section of EMPATHY

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	102.9773	17.162	2.587269	68	126	58

Skewness and Kurtosis Section of EMPATHY

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.3855476	1.899917	-0.3992908	-1.086331	0.1666582	0.1332071
Std Error	0.2375494	0.28156			1.411557E-02	

Normality Test Section of EMPATHY

| Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9277889	8.75176E-03			Reject normality
Anderson-Darling	1.07511	8.04579E-03			Reject normality
Martinez-Iglewicz	0.9736819		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.115389		0.121	0.132	Can't reject normality
D'Agostino Skewness	-1.15067	0.2498679	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-2.5613	0.010427	1.645	1.960	Reject normality
D'Agostino Omnibus	7.8845	0.019405	4.605	5.991	Reject normality

Plots Section of EMPATHY
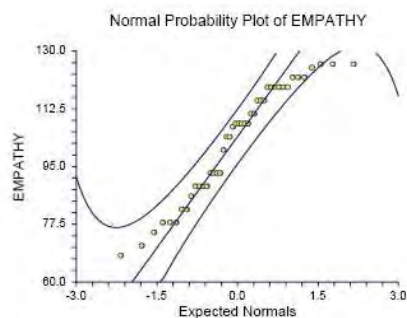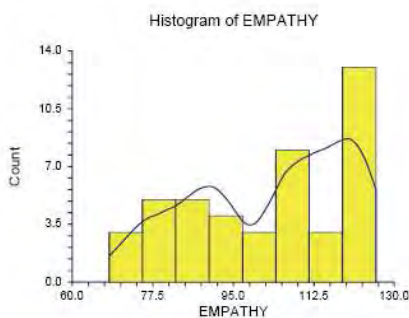
Table 22 – EQI Empathy Descriptive Statistics

79

5.2.4.7 EQI Social Responsibility

The EQI Social Responsibility results shows very low positive correlation, -0.111, to the CSI results for the sample. The results have a mean of 104.86. The Shapiro-Wilk normality test rejects normality. Skewness measures the direction and lack of symmetry and show a result of -0.52 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 1.98, less than 3 indicating lighter tails than a normal distribution.

Summary Section of SOCIAL_RESPONSIBILITY

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	104.8636	13.47623	2.031619	77	124	47

Skewness and Kurtosis Section of SOCIAL_RESPONSIBILITY

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.5231788	1.984881	-0.541828	-0.990857	0.128512	0.1052854
Std Error	0.2438563	0.3709679			1.110966E-02	

Normality Test Section of SOCIAL_RESPONSIBILITY

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9149778	3.248129E-03			Reject normality
Anderson-Darling	1.339325	1.801493E-03			Reject normality
Martinez-Iglewicz	0.9714021		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.1601928		0.121	0.132	Reject normality
D'Agostino Skewness	-1.534403	0.1249304	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-2.1626	0.030574	1.645	1.960	Reject normality
D'Agostino Omnibus	7.0311	0.029731	4.605	5.991	Reject normality

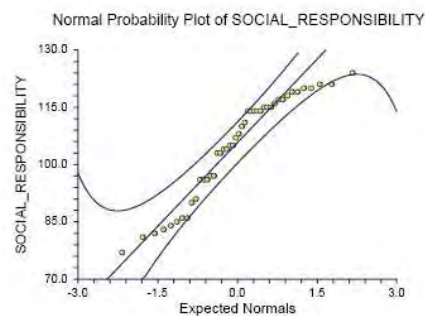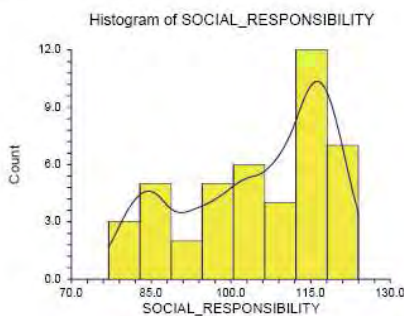**Plots Section of SOCIAL_RESPONSIBILITY**

Table 23 – EQI Social Responsibility Descriptive Statistics

5.2.4.8 EQI Interpersonal Relationship

The EQI Interpersonal Relationship results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 105.27. The Shapiro-Wilk normality test rejects normality. Skewness measures the direction and lack of symmetry and show a result of -0.76 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.72, less than 3 indicating lighter tails than a normal distribution.

Summary Section of INTERPERSONAL_RELATIONSHIP

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	105.2727	14.98428	2.258965	69	126	57

Skewness and Kurtosis Section of INTERPERSONAL_RELATIONSHIP

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.7659734	2.727055	-0.7932772	-0.1568813	0.1423377	0.1102694
Std Error	0.2291203	0.5661144			1.604845E-02	

Normality Test Section of INTERPERSONAL_RELATIONSHIP

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9248202	6.92309E-03			Reject normality
Anderson-Darling	0.999092	1.238152E-02			Reject normality
Martinez-Iglewicz	1.043292		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.1033959		0.121	0.132	Can't reject normality
D'Agostino Skewness	-2.160973	3.069743E-02	1.645	1.960	Reject normality
D'Agostino Kurtosis	-0.0320	0.974433	1.645	1.960	Can't reject normality
D'Agostino Omnibus	4.6708	0.096770	4.605	5.991	Can't reject normality

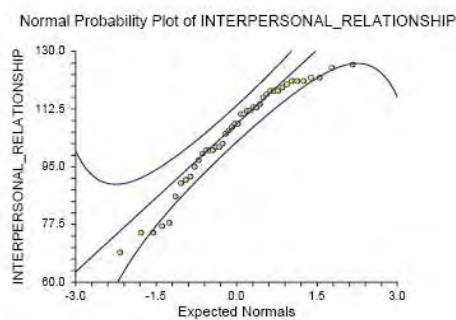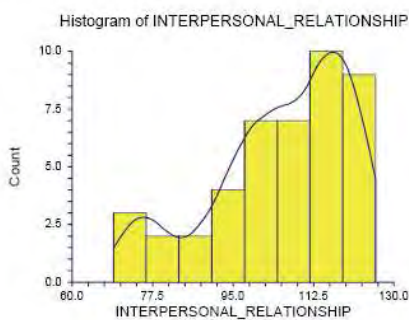**Plots Section of INTERPERSONAL_RELATIONSHIP**

Table 24 – EQI Interpersonal Relationship Descriptive Statistics

5.2.4.9 EQI Reality Testing

The EQI Reality Testing results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 103.95. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.66 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 3.40, less than 3 indicating heavier tails than a normal distribution.

Summary Section of REALITY_TESTING

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	103.9545	14.406	2.171786	60	128	68

Skewness and Kurtosis Section of REALITY_TESTING

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.6660326	3.402237	-0.6897739	0.6018167	0.1385798	0.1058472
Std Error	0.3543663	0.8361662			1.761073E-02	

Normality Test Section of REALITY_TESTING

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9635704	0.1767519			Can't reject normality
Anderson-Darling	0.3976755	0.3670729			Can't reject normality
Martinez-Iglewicz	1.074478		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	6.944058E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-1.911188	5.598041E-02	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	0.9970	0.318751	1.645	1.960	Can't reject normality
D'Agostino Omnibus	4.6467	0.097945	4.605	5.991	Can't reject normality

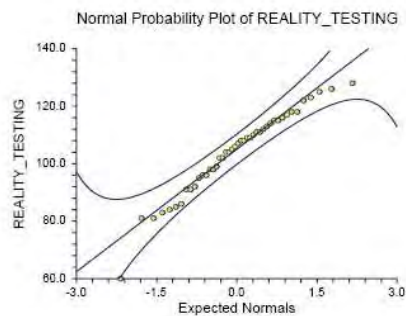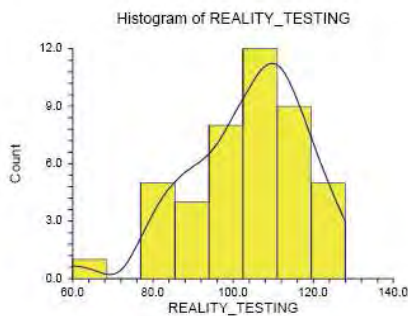**Plots Section of REALITY_TESTING**

Table 25 – EQI Reality Testing Descriptive Statistics

5.2.4.10   EQI Flexibility

The EQI Flexibility results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 100.99. The Shapiro-Wilk normality test cannot reject normality, however the D'Agostino Kurtosis normality test rejects normailty. Skewness measures the direction and lack of symmetry and show a result of -0.08 indicating a slight long tail to the left. Kurtosis measures the heaviness of the tails, the result is 1.99, less than 3 indicating lighter tails than a normal distribution.

Summary Section of FLEXIBILITY

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	100.9091	15.80818	2.383173	72	132	60

Skewness and Kurtosis Section of FLEXIBILITY

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	8.313504E-02	1.999532	8.609846E-02	-0.9743932	0.1566576	0.1340909
Std Error	0.22837	0.2040071			1.206532E-02	

Normality Test Section of FLEXIBILITY

| Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9638005	0.1802521			Can't reject normality
Anderson-Darling	0.5986282	0.1178479			Can't reject normality
Martinez-Iglewicz	0.9360784		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	0.1437066		0.121	0.132	Reject normality
D'Agostino Skewness	0.2535135	0.7998714	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-2.0990	0.035814	1.645	1.960	Reject normality
D'Agostino Omnibus	4.4702	0.106981	4.605	5.991	Can't reject normality

Plots Section of FLEXIBILITY
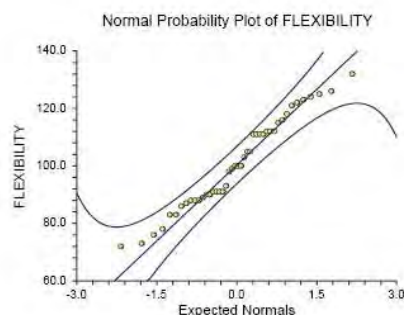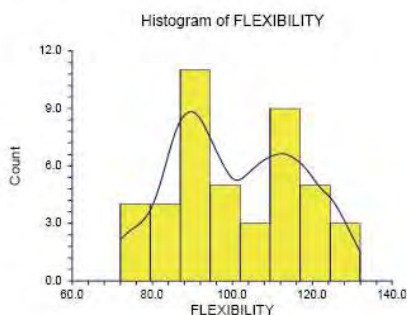
Table 26 – EQI Flexibility Descriptive Statistics

83

5.2.4.11 EQI Problem Solving

The EQI Problem Solving results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 105.99. The Shapiro-Wilk normality test cannot reject normality, however the D'Augustino Kurtosis normality test rejects normailty. Skewness measures the direction and lack of symmetry and show a result of -0.04 indicating a slight long tail to the left. Kurtosis measures the heaviness of the tails, the result is 1.92, less than 3, indicating lighter tails than a normal distribution.

Summary Section of PROBLEM_SOLVING

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	105.9773	12.65185	1.907338	84	127	43

Skewness and Kurtosis Section of PROBLEM_SOLVING

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-4.216317E-02	1.925631	-4.366611E-02	-1.057436	0.1193826	0.101034
Std Error	0.2059661	0.200013			9.004419E-03	

Normality Test Section of PROBLEM_SOLVING

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9609916	0.1417311			Can't reject normality
Anderson-Darling	0.3714787	0.4221931			Can't reject normality
Martinez-Iglewicz	0.9445729		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	6.357231E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.1286784	0.8976122	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-2.4348	0.014899	1.645	1.960	Reject normality
D'Agostino Omnibus	5.9449	0.051177	4.605	5.991	Can't reject normality

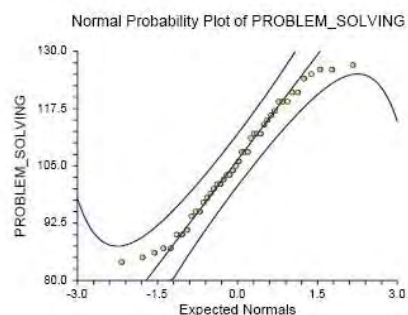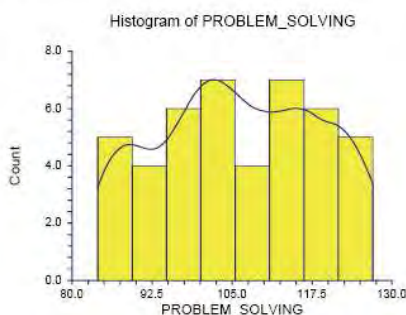**Plots Section of PROBLEM_SOLVING**

Table 27 – EQI Problem Solving Descriptive Statistics

5.2.4.12   EQI Stress Tolerance

The EQI Stress Tolerance results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 103.65. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.32 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.62, less than 3 indicating lighter tails than a normal distribution.

Summary Section of STRESS_TOLERANCE

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	103.6591	12.51779	1.887128	75	128	53

Skewness and Kurtosis Section of STRESS_TOLERANCE

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.3241593	2.622955	-0.3357143	-0.2738577	0.1207592	9.286647E-02
Std Error	0.2207237	0.4199754			0.0123297	

Normality Test Section of STRESS_TOLERANCE

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9797704	0.6244489			Can't reject normality
Anderson-Darling	0.3131432	0.548041			Can't reject normality
Martinez-Iglewicz	0.9637057		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	6.991354E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.9736704	0.3302202	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-0.2423	0.808558	1.645	1.960	Can't reject normality
D'Agostino Omnibus	1.0067	0.604491	4.605	5.991	Can't reject normality

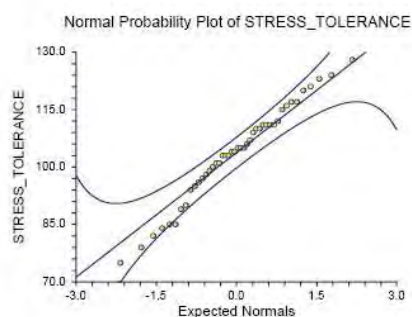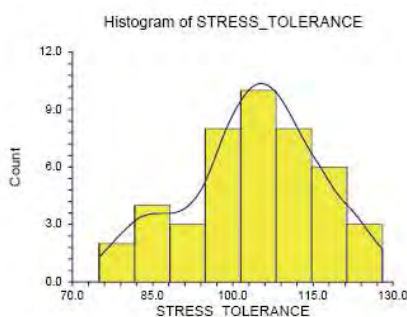**Plots Section of STRESS_TOLERANCE**

Table 28 – EQI Stress Tolerance Descriptive Statistics

85

5.2.4.13 EQI Impulse Control

The EQI Impulse Control results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 103.06. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.08 indicating a slight long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.31, less than 3 indicating lighter tails than a normal distribution.

Summary Section of IMPULSE_CONTROL

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	103.0682	12.24061	1.845341	78	126	48

Skewness and Kurtosis Section of IMPULSE_CONTROL

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-8.089616E-02	2.310721	-8.377977E-02	-0.6247119	0.1187622	9.331293E-02
Std Error	0.1923014	0.3090519			1.060674E-02	

Normality Test Section of IMPULSE_CONTROL

Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9761212	0.4865123			Can't reject normality
Anderson-Darling	0.2839133	0.6317727			Can't reject normality
Martinez-Iglewicz	0.9416242		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	7.857068E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.2467006	0.80514	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	-1.0100	0.312501	1.645	1.960	Can't reject normality
D'Agostino Omnibus	1.0809	0.582475	4.605	5.991	Can't reject normality

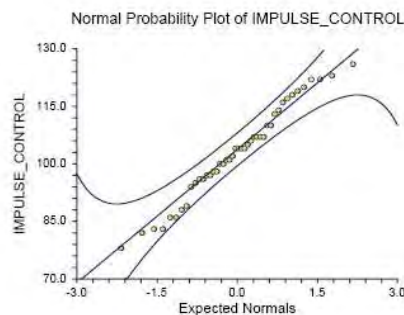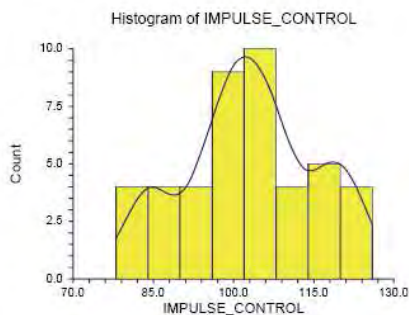**Plots Section of IMPULSE_CONTROL**

Table 29 – EQI Impulse Control Descriptive Statistics

5.2.4.14   EQI Happiness

The EQI Happiness results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 105.65. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.58 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 3.41, more than 3 indicating heavier tails than a normal distribution.

Summary Section of HAPPINESS

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	105.6591	11.98438	1.806713	69	126	57

Skewness and Kurtosis Section of HAPPINESS

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.5867711	3.416457	-0.6076871	0.6177954	0.1134249	8.814783E-02
Std Error	0.3721812	0.8196592			1.412627E-02	

Normality Test Section of HAPPINESS

| Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.966958	0.2353811			Can't reject normality
Anderson-Darling	0.3458318	0.4832786			Can't reject normality
Martinez-Iglewicz	1.048287		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	6.526762E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-1.704956	8.820257E-02	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	1.0142	0.310484	1.645	1.960	Can't reject normality
D'Agostino Omnibus	3.9355	0.139772	4.605	5.991	Can't reject normality

Plots Section of HAPPINESS
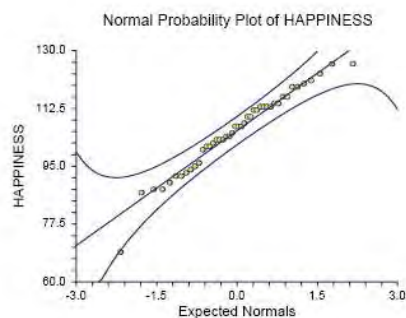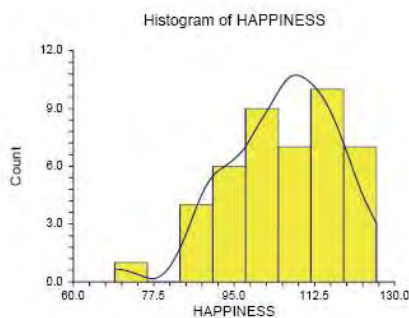
Table 30 – EQI Happiness Descriptive Statistics

5.2.4.15   EQI Optimism

The EQI Optimism results shows very low positive correlation, 0.036, to the CSI results for the sample. The results have a mean of 100.06. The Shapiro-Wilk normality test cannot reject normality. Skewness measures the direction and lack of symmetry and show a result of -0.20 indicating a long tail to the left. Kurtosis measures the heaviness of the tails, the result is 2.95, less than 3 indicating lighter tails than a normal distribution.

Summary Section of OPTIMISM

Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	Range
44	100.0682	13.98903	2.108925	62	129	67

Skewness and Kurtosis Section of OPTIMISM

Parameter	Skewness	Kurtosis	Fisher's g1	Fisher's g2	Coefficient of Variation	Coefficient of Dispersion
Value	-0.2081665	2.95088	-0.2155868	9.462976E-02	0.139795	0.1137517
Std Error	0.3312781	0.5121351			0.0154234	

Normality Test Section of OPTIMISM

| Test Name	Test Value	Prob Level	10% Critical Value	5% Critical Value	Decision (5%)
Shapiro-Wilk W	0.9877751	0.9167004			Can't reject normality
Anderson-Darling	0.2010807	0.8818796			Can't reject normality
Martinez-Iglewicz	0.993841		1.105365	1.161866	Can't reject normality
Kolmogorov-Smirnov	7.588762E-02		0.121	0.132	Can't reject normality
D'Agostino Skewness	-0.6311634	0.5279337	1.645	1.960	Can't reject normality
D'Agostino Kurtosis	0.3644	0.715592	1.645	1.960	Can't reject normality
D'Agostino Omnibus	0.5311	0.766775	4.605	5.991	Can't reject normality

Plots Section of OPTIMISM
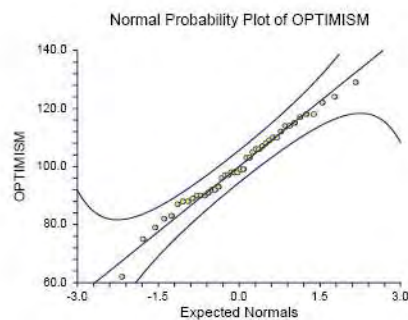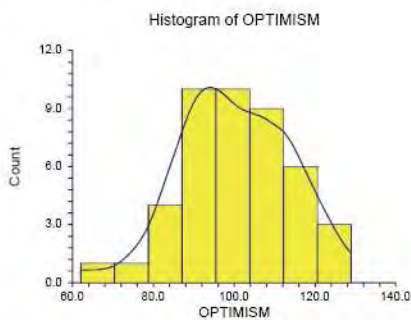
Table 31 – EQI Optimism Descriptive Statistics

5.3 Regression Results

Multiple regression routines, using Huber's robust regression method (Huber's constant of 1.345) as an alternative to least squares method, so as to reduce the influence of outliers, was run on the data. The dependant variable was the CSI score and the individual independent variables were the EQ scales.

As seen in the table below, the only EQi scale, Independence, had a significant relationship to CSI. The coefficient was -0.0683 which showed that the relationship was small and negative.

EQ	CSI
TOTAL_EQ	No Significant Relationship
INTRAPERSONAL	No Significant Relationship
SELF_REGARD	No Significant Relationship
EMOTIONAL_SELF_AWARENESS	No Significant Relationship
ASSERTIVENESS	No Significant Relationship
INDEPENDENCE	-0.0683
SELF_ACTUALIZATION	No Significant Relationship
INTERPERSONAL	No Significant Relationship
EMPATHY	No Significant Relationship
SOCIAL_RESPONSIBILITY	No Significant Relationship
INTERPERSONAL_RELATIONSHIP	No Significant Relationship
STRESS_MANAGEMENT	No Significant Relationship

STRESS_TOLERANCE	No Significant Relationship
IMPULSE_CONTROL	No Significant Relationship
ADAPTABILITY	No Significant Relationship
REALITY_TESTING	No Significant Relationship
FLEXIBILITY	No Significant Relationship
PROBLEM_SOLVING	No Significant Relationship
GENERAL_MOOD	No Significant Relationship
OPTIMISM	No Significant Relationship
HAPPINESS	No Significant Relationship

Table 32 - EQi and CSI - Regression Results

5.4   Top 5 Mean EQI Results

Based on the means obtained above, the following are the top 5 EQI sibscaled based on the means of the results.

1. Assertiveness

2. Interpersonal relationships

3. Problem solving

4. Happiness

5. Empathy

5.5 Summary

This chapter presented the analysis of the data collected for the research. The regression analysis of the data showed only one significant relationship between EQI Independence and the Customer Satisfaction results.

6 DISCUSSION OF THE RESULTS

6.1 Introduction

This chapter discusses the results presented in Chapter 5 and provides insight into the hypotheses laid out in Chapter 3. The chapter is organised as follows: each set of hypotheses is preceded by a discussion of the results for each relevant construct. This is followed by the findings for each hypothesis. Where possible the findings are compared and contrasted to the literature in Chapter 2.

6.1.1 *Overall EQi and Service CSI*

Hypothesis 1 was tested, where

H_0: $EQi_O = CSI_O$

H_A: $EQi_O <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis was not rejected and thus there is no relationship between the EQi Total Score and the service advisor customer satisfaction index.

6.1.2 *EQi Scales and Service CSI*

Hypothesis 2 was tested, where

H_0: $EQi_{Intra} = CSI_O$

H_A: $EQi_{Intra} <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis was not rejected and thus there is a no relationship between the EQi Intrapersonal scale score and the service advisor customer satisfaction index.

Hypothesis 3 was tested, where

H_0: $EQi_{Inter} = CSI_O$

H_A: $EQi_{Inter} <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis was not rejected and thus there is no relationship between the EQi Interpersonal scale score and the service advisor customer satisfaction index.

Hypothesis 4 was tested, where

H_0: $EQi_{Adap} = CSI_O$

H_A: $EQi_{Adap} <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis was not rejected and thus there is no relationship between the EQi Adaptability scale score and the service advisor customer satisfaction index.

Hypothesis 5 was tested, where

H_0: $EQi_{StressMgnt} = CSI_O$

H_A: $EQi_{StressMgnt} <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis was not rejected and thus there is no relationship between the EQi Stress Management scale score and the service advisor customer satisfaction index.

Hypothesis 6 was tested, where

H_0: $EQi_{GenMood} = CSI_O$

H_A: $EQi_{GenMood} <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis was not rejected and thus there is no relationship between the EQi General Mood scale score and the service advisor customer satisfaction index.

6.1.3 EQi Sub Scales Service CSI

Hypothesis 7 was tested, where

H_0: EQi$_{SelfRgrd}$ = CSI_O

H_A: EQi$_{SelfRgrd}$ <> CSI_O

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis was not rejected and thus there is no relationship between the EQi Self Regard sub scale score and the service advisor customer satisfaction index.

Hypothesis 8 was tested, where

H_0: EQi$_{EmotSelfAware}$ = CSI_O

H_A: EQi$_{EmotSelfAware}$ <> CSI_O

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis was not rejected and thus there is no relationship between the EQi Emotional Self Awareness sub scale score and the service advisor customer satisfaction index.

Hypothesis 9 was tested, where

H_0: EQi$_{Assertive}$ = CSI_O

H_A: EQi$_{Assertive}$ <> CSI_O

94

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis was not rejected and thus there is no relationship between the EQi Assertiveness sub scale score and the service advisor customer satisfaction index.

Hypothesis 10 was tested, where

H_0: EQi$_{Indep}$ = CSI_O

H_A: EQi$_{Indep}$ <> CSI_O

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis is rejected and thus there is a significant relationship between the EQi Self Actualisation sub scale score and the service advisor customer satisfaction index. The regression coefficient was -0.0728 indicating a small negative relationship. Since the independence scale identifies people who are self-reliant, autonomous and independent in their thinking and actions. This small negative significant relationship indicated that opposite of independence has a significant relationship on CSI. The opposite of independence is dependence and thus in a dealership that would be on the other employees around you. This indicates that the achievement of CSI is not an individual task, but the sum of the efforts of all employees at the dealership.

Hypothesis 11 was tested, where

H_0: EQi$_{SelfAct}$ = CSI_O

H_A: EQi$_{SelfAct}$ <> CSI_O

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis not rejected and thus there is no relationship between the EQi Self

Actualisation sub scale score and the service advisor customer satisfaction index.

Hypothesis 12 was tested, where

H_0: EQi$_{Empathy}$ = CSI$_O$

H_A: EQi$_{Empathy}$ <> CSI$_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis not rejected and thus there is no relationship between the EQi Empathy sub scale score and the service advisor customer satisfaction index.

Hypothesis 13 was tested, where

H_0: EQi$_{SocResp}$ = CSI$_O$

H_A: EQi$_{SocResp}$ <> CSI$_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis is rejected and thus there is a significant relationship between the EQi Social Responsibility sub scale score and the service advisor customer satisfaction index.

Hypothesis 14 was tested, where

H_0: EQi$_{InterpRelation}$ = CSI$_O$

H_A: EQi$_{InterpRelation}$ <> CSI$_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis not rejected and thus there is no relationship between the EQi Social Interpersonal Relationship sub scale score and the service advisor customer satisfaction index.

96

Hypothesis 15 was tested, where

H_0: EQi$_{RealTest}$ = CSI_O

H_A: EQi$_{RealTest}$ <> CSI_O

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis is not rejected and thus there is no relationship between the EQi Reality Testing sub scale score and the service advisor customer satisfaction index.

Hypothesis 16 was tested, where

H_0: EQi$_{Flex}$ = CSI_O

H_A: EQi$_{Flex}$ <> CSI_O

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis is not rejected and thus there is no relationship between the EQi Flexibility sub scale score and the service advisor customer satisfaction index.

Hypothesis 17 was tested, where

H_0: EQi$_{ProbSol}$ = CSI_O

H_A: EQi$_{ProbSol}$ <> CSI_O

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis is not rejected and thus there is no relationship between the EQi Problem Solving sub scale score and the service advisor customer satisfaction index.

Hypothesis 18 was tested, where

H_0: $EQi_{StressTol} = CSI_O$

H_A: $EQi_{StressTol} <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis is not rejected and thus there is no relationship between the EQi Stress Tolerance sub scale score and the service advisor customer satisfaction index.

Hypothesis 19 was tested, where

H_0: $EQi_{ImpCont} = CSI_O$

H_A: $EQi_{ImpCont} <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis is not rejected and thus there is no relationship between the EQi Impulse Control sub scale score and the service advisor customer satisfaction index.

Hypothesis 20 was tested, where

H_0: $EQi_{Happiness} = CSI_O$

H_A: $EQi_{Happiness} <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis is not rejected and thus there is no relationship between the EQi Happiness sub scale score and the service advisor customer satisfaction index.

Hypothesis 21 was tested, where

H_0: $EQi_{Optimism} = CSI_O$

H_A: $EQi_{Optimism} <> CSI_O$

Based on the results in Table 32 - EQi and CSI - Regression Results, the null hypothesis is not rejected and thus there is no relationship between the EQi Optimism sub scale score and the service advisor customer satisfaction index.

6.2 Top 5 EQI Scores for Mercedes-Benz Service Advisors

The following list shows the list of the top EQI scales for the Mercedes-Benz service advisors.

1. Self Regard

2. Problem Solving

3. Happiness

4. Intrapersonal Relationship

5. Emotional Self Awareness

The following list shows the top EQI subscales defined for successful Customer Services Representatives (Stein & Book, 2003).

1. Stress Tolerance

2. Assertiveness

3. Happiness

4. Intrapersonal Relationship

5. Self Actualisation

It can be seen from a comparison of the two lists that Happiness and Interpersonal Relationships are the only two components that are common between them. The happiness scale defines individuals as those who are able to feel satisfied with their lives, genuinely enjoy the company of others, and

have the ability to derive pleasure from life achieve high scores on this subscale. These people commonly have a happy disposition and are pleasant to be with. The Interpersonal scale says that the respondents are able to establish and maintain mutually satisfying relationships generally obtain high scores on this subscale. These people are characterized by the capacity for intimacy and the giving and receiving of affection.

There is also not a degree of commonality between what is defined at a list of EQI attributes for successful Customer Services Representatives and Mercedes-Benz Service Advisors.

6.3 Summary

The research found only one significant relationship between emotional intelligence and the Mercedes-Benz customer satisfaction results. This relationship was a significant negative relationship between the CSi result and the EQI Independence sub scale. The Independence EQI scale is defined as follows: "People who are self-reliant, autonomous, and independent in their thinking and actions tend to receive high scores on this subscale. These people may ask for and consider the advice of others, but they rarely depend upon others to make important decisions or do things for them. These people rarely cling to other people."

The research also did not find any common EQI subscales between what is defined as the top attributes for Customer Services Representatives and Mercedes-Benz   Service   Advisors.

100

7 CONCLUSION AND RECOMMENDATIONS

DaimlerChrysler AG has given Mercedes-Benz an objective, to be number 1 in Competitive Customer Satisfaction, in every country, in the premium class segment, by the end of 2009 (Joyce, 2007). DaimlerChrysler believes that by achieving this they will go a long way to securing the Mercedes-Benz brand as not just a premium class vehicle, but that customers have a premium class experience while owning their vehicle. DaimlerChrysler believes that this will create a competitive advantage for them and in doing so secure long term vehicle sales and profitability (Joyce 2007).

This is quite a challenge to achieve and sustain, looking at variability in the results by vehicle manufacturer per scoring period (Figure 2 - Synovate Service Competitive Customer Satisfaction Index - Passenger Vehicles). Joyce (2007) has said that to achieve this objective, Mercedes-Benz cannot rely on incrementally improving the things that they have been doing already, but need to think of the customer touch points, these moments of truth, that Carlzon (1987) discusses, where every interaction with a customer can enhance or damage the organisation reputation, and then to influence the transactional and relational components (Langlois & Tocquer 1998) in these customer moments of truth.

This research aimed to examine if there was any indication of the ability of a service advisor to effectively perceive, express, understand and regulate emotions in himself or herself and others so as to ensure if this determinant of

customer satisfaction was successfully carried out. It can be concluded from the evidence, as provided by the EQI tests and CSI data of the service advisors, that the Mercedes-Benz customer satisfaction survey does not measure ability of a service advisor to effectively perceive, express, understand and regulate emotions in himself or herself and others to ensure that this relational determinant of customer satisfaction is successfully carried out. A review of the CSI questions and their respective weightings show that there is a focus by Mercedes-Benz on the transactional component of customer satisfaction, it is thus not surprising that there was not more evidence to show this emotional management.

The theory suggests that there is a significant positive relationship between emotional intelligence and customer satisfaction. Further research however need to be done to understand in the automotive industry how these questions to customers should be structured so as to show a significant positive relationship between these two variables.

Stein and Book (2003) in their book The EQ Edge give us insight into the top 5 statistically significant EQi subscales for successful people in different job types. The customer service representative's scales were:

1. Stress Tolerance

2. Assertiveness

3. Happiness

4. Intrapersonal Relationship

5. Self Actualisation

Customer Service Training models should be created , where EQ competencies becomes the pre-requisite foundational programme for all employees, prior to the training of customer service skillsets. This program should then go a long way to improve the defined top EQI scales.

In order to create a service culture throughout the entire organisation, a customer service-oriented organisation will ensure that all employees, including top management personnel, participate in the EQ development programme.

These companies should also embark on a long-term strategic plan to transform their organisation into an "emotionally intelligent" organisation and their employees into highly EQ people – this should ultimately be the competitive edge that sets them apart from other companies in the ultimate goal to be the best at customer satisfaction.

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108

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111

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APPENDIX 1: DAIMLERCHRYSLER MERCEDES-BENZ SERVICE CSI QUESTIONS.

Synovate Service Customer Satisfaction Questions, with respective weightings, for Mercedes-Benz:

- Was the work requested, completed correctly the first time? (16.6%)

- The assurance that your vehicle was in good hands (18.3%)

- Informed in advance of any extra work, costs or service delays (15.5%)

  - If 'No' - meaning: They failed to do so or it was not necessary?

- The explanation provided of the work done and the costs incurred (17.1%)

- Was your vehicle ready at the promised time? (16.4%)

- After delivery, did you receive any of the following from the dealership to determine your satisfaction? (7.2%)

  - A letter or card (may have been on collection)

  - A fax, e-mail or SMS

  - A telephone call

  - A personal visit

- Would you recommend the DEALERSHIP to a friend? (8.8%)

APPENDIX 2: BARON EQ-I COMPOSITE SCALES AND SUBSCALES

Intrapersonal Scales

- Self-Regard

- Emotional Self Awareness

- Assertiveness

- Independence

- Self-Actualization

Interpersonal Scales

- Empathy

- Social Responsibility

- Interpersonal Relationship

Adaptability Scales

- Reality Testing

- Flexibility

- Problem Solving

Stress Management Scales

- Stress Tolerance

- Impulse Control

General Mood Scales

- Optimism

- Happiness

APPENDIX 3: LETTER TO MERCEDES-BENZ DEALER PRINCIPALS

Good Day Dealer Colleague,

I am busy conducting research on the link between MBPC Service CSI and Service Advisor Emotional intelligence (EQ) (see attached research proposal for more info). This research forms part of my MBA research that I am busy finalising.

The reason I am contacting you is that I have identified an individual/ Individuals in your dealership/s that meets my criteria for my study (see spreadsheet). I would like to request that I can do an Emotional Intelligence assessment on these individuals for the research.

Requested Actions:

- Can I ask that you identify the service advisors in your dealership in the spreadsheet attached

- Can you then locate their Service Advisor code and then fill in their Names and email addressee's into the spreadsheet

- Please can you then email the information back to me (darret.king@dcx.com or darretking@gmail.com)

I would really appreciate it if this could be done as soon as possible, so that the assessments can be done next week.

What I will do upon receiving the information:

- I will then make contact with your Service Advisors, informing them of your permission to do the EQ assessment

- They will then do an on-line EQ assessment (15 minutes)

- Once I have collected all the information I will be finalising my report by 14 November 2007

- I will then share the results of my study with the dealer network in the   New   Year.

APPENDIX 4: LETTER TO MERCEDES-BENZ SERVICE ADVISORS

Dear Mercedes-Benz Service Advisor,

Further to a communication to your dealer principal, explaining the we are doing some research on CSI and emotions, and that we required your participation. I would like to inform you that your help is required in a survey to understand the relationship between CSI and emotions.

Please find below all instructions with regards to the survey. The survey needs to be completed by Friday 26 November 2007.

Please note that while the survey requires that you fill in your name, it is required so that we can match your results to your CSI results. Your individual scores remain confidential and will not be shared with anyone at DCSA or your dealership.

We will share the overall results of the survey with the network in the new year.

Thanking you in advance for taking the time to complete the survey, please continue reading for the instructions.

Please note the following:

117

1. Complete the questionnaire when you are alone, have time (it usually takes around 20 minutes), are relaxed and able to concentrate.

2. Try to complete the questionnaire in one session (avoid interruptions if possible).

3. Read the instructions carefully.

4. Do not think too long about the questions.

Step-by-step instructions:

- Please visit www.mhsassessments.com and login with the code and password that appear below.

- Please note if you wish to complete the questionnaire in another language other than English this option is available to the left of the screen called "Select Language".

- Code: xxxx-xxx-xx
- Password: xxxxx (case sensitive)

- Click on Login
- Read through the "Permitted Access" and click on "I Accept".
- Read through the Welcome Note and click on "Continue".
- Instructions for how to complete the BarOn EQ-i (133) will appear once you have logged in.
- Insert your First Name, Last Name, Age and Gender (for research and scoring purposes only) and click on "Continue".

Further Information

- The questionnaire contains 133 questions.

- Please read each question carefully and select one of the 5 possible answers to choose from.

- The screen will automatically move onto the next question.

- Please ensure that you answer all 133 questions.

- [If you left out any answers, the system will indicate the "Missed Items" and request you to complete them.

- You may not leave out any answers.

- Answer the missed items and click on "Continue" to complete the test.

- Exit your internet browser.