

CORPORATE SUSTAINABILITY AND CUSTOMER LOYALTY: THE CASE OF THE RAILWAY INDUSTRY

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Abstract

Introduction of the mass rapid transit railway system through the Gautrain has not only addressed the transport issue in South Africa but has also motivated and promoted the country's economic growth by creating employment. Despite the increase in research focusing on the importance of the Gautrain to the South African economy, the influence of perceived convenience, image and safety on commuter satisfaction and loyalty in the South African mass rapid transit railway system context is still limited. This paper used a data collected from 206 Gautrain commuters in the Gauteng province of South Africa to examine the interplay between perceived convenience, image, safety, commuter satisfaction and loyalty. Smart PLS software technique was used to statistically analyse the measurement and structural models. The results revealed that perceived convenience, image and safety positively influenced commuter satisfaction, which, in turn, influenced commuter loyalty. These results may be used by marketers in mass public railway systems to initiate strategies intended to increase both commuter satisfaction and loyalty.

Keywords: Perceived Convenience, Perceived Image, Perceived Safety, Commuter Satisfaction, Commuter Loyalty, Corporate Sustainability

1. INTRODUCTION

Countries such as China, Italy, France and United States of America make use of mass rapid transit railway systems in order to transport vast numbers of people within short periods of time. A mass rapid transit railway system is an urban transport system which uses special rails to run continuous high capacity trains (Fraszczuk, Da Silva, Gwózdź & Vasileva, 2014). Following the steps of these developed countries, South Africa developed the Gautrain, which is a metro train that operates in Gauteng's province, which is the economic hub of the country. As mentioned by Garaba (2016), the introduction of the Gautrain has not only addressed various commuter transportation challenges, but it has also motivated and promoted South Africa's economic growth by creating employment. Gautrain metro is the first and only metro train in South Africa, using 10 stations to link three metropolitan areas which are Johannesburg, Pretoria and East Rand (Musakwa, 2014). The aim of the Gautrain metro is to provide passengers with safety, punctuality (fast), reliability, comfort and efficient transport (Jensen, 2010). Moreover, besides boosting the economy of the country, it enables commuters who depend on private and public transport to spend less since Gautrain is priced cheaper than car travel and so can outperform the cost of driving (Slabbert, 2015). This ability to offset the costs associated with driving stem from the view that Gautrain is a fast train that typically achieves

operational speeds ranging between 160 km to 180 km per hour (Jensen, 2010).

There are several relevant issues that are associated with public transport characteristics that offer more advantage to Gautrain. According to King and Ssamula (2008), these characteristics include convenience, image, safety, availability, comfort, reliability, satisfaction and loyalty. The Gautrain addresses almost these characteristics in the sense that the metro train considers the needs of the passengers and intends to meet them (Walters, 2014). As such, when these factors are combined together, Gautrain metro is likely to be a successful venture and it would be a focus for influencing more commuters in the long run (Department of Transport, 2012). In addition, it is through these characteristics that commuters have been attracted to use Gautrain more often than not. Arising from the aforementioned, the primary objective of this paper is to examine the causal relationships that may exist between perceived convenience, perceived image, perceived climate safety, commuter satisfaction and commuter loyalty in the Gautrain public transportation service in South Africa. To achieve this primary objective, four secondary objectives were formulated; namely, (1) to determine the influence of Gautrain convenience on commuter satisfaction; (2) to establish the influence of Gautrain image on commuter satisfaction; (3) to determine the influence of Gautrain safety on commuter satisfaction; and (4) to establish the influence of commuter satisfaction on commuter loyalty.

This paper is structured as follows: First, a problem statement is presented, followed by a literature review on the constructs under investigation. Hypotheses stating the proposed relationships are then formulated, based on the review of literature. Thereafter, the research methodology, the data analysis, research results and discussions will be outlined. The final sections of the paper comprise of limitations and implications for further research, conclusions and managerial implications.

1.1. Corporate sustainability and its importance for the Gautrain transport system in South Africa

Corporate sustainability may be perceived as an approach to business that generates long-term shareholder wealth through embracing opportunities as well as managing risks in the triple bottom line (Avey, 2015). The triple bottom line involves three dimensions which are environmental stewardship, economic development, and social equity (Zietsman, Ramani, Liban & Van der Merwe, 2013:15). Generally, companies aim to maximise the social, environmental and economic benefits of their operations in order to reduce the potential negative impact of such operations (Wong 2014). In the context of the Gautrain, corporate sustainability is linked to the company's desire to contribute to a better quality of life for the population of South Africa (Gautrain, 2015). The growing importance of corporate sustainability has allowed Gautrain to contribute positively to the country's economy by generating several employment opportunities, with local communities and developing various kinds of small businesses (Fombad, 2015). For instance, results had shown that by 2015, the Gautrain had created almost 34,800 direct job opportunities during construction and an estimated 922 sustainable jobs after the start of operations (Gautrain, 2015). It is further estimated that close to R46 billion total GDP impact had been added to the South African economy due to property developments induced by the Gautrain, contributing a further 245, 000 jobs (Gautrain, 2015). In addition, the Gautrain is a green form of public transport which is electrically powered, thereby contributing to the reduction of air pollution (Bohlweki 2002). Also, due to its current capacity to transport more than 1.3 million passengers each month, the Gautrain has been able to reduce private motor vehicle usage on the roads (Gauteng, 2014). Therefore, there is evidence of corporate sustainability at work in the operations of the Gautrain.

1.2. Problem Statement

Customer satisfaction is typically expected to be positively and directly related to customer loyalty, and the link between commuter satisfaction and customer loyalty is perceived to be so manifest that the relationship often is taken for granted (Helgesen, 2006). This relationship cannot be achieved without other factors or antecedents such as perceived convenience (Salini & Kenett, 2009), perceived image (Helgesen, 2006) and perceived safety climate (Gil-Saura & Ruiz-Molina, 2009). This paper reinforces that convenience, image and climate safety are

related to satisfaction which leads to commuter loyalty. Despite the view that the association between customer satisfaction and customer loyalty has increased in popularity over the years, very few studies have separately investigated this fundamental relationship taking cognisance of the role performed by latent constructs such as perceived convenience, perceived image (Jain, Aggarwal, Kumar, Singhal & Sharma, 2014), and perceived safety climate (Lee & Dalal, 2014) in relation with commuter satisfaction (Githui, Okamura & Nakamura, 2010) and commuter loyalty. Furthermore, there is a paucity of studies that have focused on these constructs within the public transportation sector in South Africa. In this paper, the focus is on Gautrain public service with respect to the links between perceived convenience of the Gautrain, perceived image of the Gautrain, perceived safety climate of the Gautrain, commuter satisfaction and commuter loyalty. Since the Gautrain project is a fairly new phenomenon that is still ongoing in South Africa, this existent research gap has to be manipulated in order to gain clarity on the antecedents of commuter loyalty in this industry. This information could then be used to develop initiatives to stimulate enhanced use of the Gautrain as a public transport utility.

2. LITERATURE REVIEW

2.1. Perceived Convenience

According to Wardman (2014) the term convenience is related to the lack of effort in using transport services and this is with specific regards to the manner in which the services are run. This implies that perceived convenience embraces comfort, service frequency and reliability, travelling time and facilities for protecting commuters from weather variants as they wait for the metro train (King & Ssamula, 2008). Perceived convenience provides multiple advantages such as the usage of a card system for travelling instead of using cash, which enables passengers to avoid purchasing several different tickets (Anderson, Condry, Findlay, Brage-Ardao & Li, 2013). Additionally, convenience is important in mass rapid transit railway systems because it enables the metro train to be more useful and appropriate in that it will be available at the right location in the time to transport passengers (Anderson *et al*, 2013). Thus, perceived convenience may also be considered as a picture of the environment or station facilities, accessibility as well as the interchange between trains and the frequency of service (Crockett & Hounsell, 2005)

2.2. Perceived Image

In this paper, the definition of perceived image is related to public transportation. Perceived image is considered to be associated with the provision of helpful staff, well designed and comfortable vehicles, quality of the trip, waiting areas such as stations which are clean to the commuters (King & Ssamula, 2008). It has been noted by (Paul, 2012) that people have different points of view regarding rail service. However, in South Africa, the Johannesburg Inner City Traffic and Transportation Study (2010) revealed that most commuters found

perceived that the Gautrain was more peaceful and secure than driving their own cars. Commuters further expressed that they felt that the Gautrain is comfortable and faster, such that commuters experienced less delays, lateness, and frustrations stemming from motorists traffic congestion. More recently, a study conducted by Musakwa (2014) reveals that the Gautrain has positively changed the view of public transportation systems and even restored the dignity of the rail transport among commuters in South Africa. The same study observed that behaviours were beginning to change because people were starting to switch from driving their own cars to using the Gautrain. Furthermore, commuters wanted to be associated with the Gautrain because the parking bays still had available space even during the peak hours. Through these observations the public image of the Gautrain was, at most were classified as being positive.

2.3. Perceived Safety Climate

According to Neal and Griffin (2006) safety climate is defined as individual perceptions of the practices, procedures, priority over schedules associated to safety. In other words, safety climate helps organisations such as Gautrain to improve the company's safety and health performance by reducing injuries at the workplace. Safety climate is important for Gautrain as well as any other organisations because it enables the organisations to prioritise on passenger safety while also concentrating on other areas of operations (Zohar, 2011). For the Gautrain to be successful, it is imperative for the staff and management to understand the importance of safety climate. In fact, with safety climate a number of issues have to be prioritised, and these include the implementation of safety policies and a commitment to safety (Rodrigues, Arezes & Leão, 2015). In these policies, the rules and norms of safety should be well and clearly established based on the Gautrain's need of safety. For example, it is natural that the Gautrain has to provide commuters with a well elaborated system of security in order to prevent and avoid any kind of risks. Thus, safety climate is closely related to operations, and is characterised by the day-to-day perceptions concerning organisational policies, management, the working atmosphere and working practices.

2.4. Commuter Satisfaction

Klein (2014) defines commuter satisfaction as a customer self-reported evaluation of how happy the customers (in this case, the commuters) are regarding the service that they received from the company or the product that they have purchased. Anderson, Fornell and Lehmann (2012) claim that satisfaction should be viewed as a judgment based on cumulative experience with a particular product or service rather than a transaction specific encounter. Commuter satisfaction has to be one of the first priorities of any public transport company as well as any organisations (Bag & Sen, 2012). Satisfaction is largely influenced by the value of services provided to commuters (Titko & Lace, 2010). In the case of public transportation, these satisfaction is widely regarded to be an outcome of convenience or accessibility and availability that

commuters enjoy (Pont & McQuiken, 2005). Since satisfaction reveals the positive feeling of the commuter, it is very important for a service provider to fully understand the feelings of the commuter regarding the services that they provide (Denga, Lua, Weib & Zhanga, 2010). For this reason, it is imperative for Gautrain's staff and management to strive to meet the expectations of their commuters.

2.5. Commuter Loyalty

Flint, Blocke and Boutin (2011) define commuter loyalty as a buyer's deeply held commitment to stick with a product, service, brand or organisation consistently in the future, despite new situations or competitive overtures to induce switching. When customers are loyal to a product or a service, they are more committed to repeat buying because they are more willing to re-patronise or re-purchase the service or the product in the coming day (Walsh, Evanschitzky & Wunderlich, 2008). In other words, the attitude of a loyal commuter is to repeat transactions of a particular product or service, which is offered during a specific period of time. Ladhari, Ladhari and Morales (2011) further add that loyalty is the foundation of continuous purchasing of a product or service. In this case, for a commuter to repurchase or rebuy a product or service (become loyal) it is necessary for him/her to be satisfied with it. In this loyalty becomes the final step that the commuter will achieve once he or she is satisfied with the product or the service provided by the organisations (Martinez & Del Bosque, 2013).

3. CONCEPTUALISED FRAMEWORK AND HYPOTHESES FORMULATION

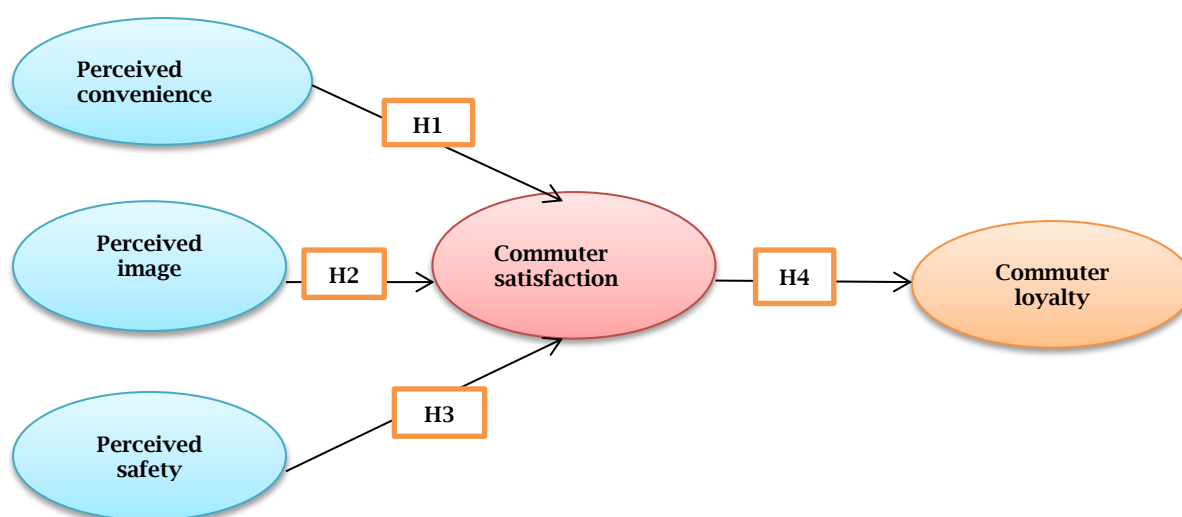
Based on the literature review, the framework illustrated in Figure 1 was conceptualised. In this framework, perceived convenience, perceived image, perceived safety are the predictors, whilst commuter satisfaction is the mediator and commuter loyalty is the outcome variable. Figure below, illustrates the framework. Hypothesised relationships between research constructs are developed thereafter.

3.1. Perceived convenience and commuter satisfaction

Commuters are satisfied with some attributes which are offered by transportation companies and these include the card system for travelling, vehicle physical conditions, safety and security as well as convenience in travelling and schedule information (Javid, Okamura Nakamura & Wang, 2013). Commuter satisfaction is related to comfort, aesthetics and eye catching of service quality (Javid *et al. ibid*). Commuter satisfaction with metro trains can be expressed in different ways and is in fact based on their own experience. It is the result of a commuter's feelings since the metro train is a typical example in terms of offering a comfortable, reliable and safe mode of public transport (Jain, Aggarwal, Kumar, Singhal & Sharma, 2014). Therefore, most commuters feel that metro trains are more reliable and comfortable due to their frequency and adherence to schedules. Accordingly, this study hypothesises that:

H1: *Perceived convenience of the Gautrain has a positive influence on commuter satisfaction.*

Figure 1. Conceptual Framework



3.2. Perceived image and commuter satisfaction

Commuter image is linked to commuter satisfaction, since both concepts have to deal with what commuters see and experience, which is related to the service or product offering by any organisation (Randheer, 2011). With regards to metro train services, commuter satisfaction depends on their images on travelling aspects such as accessibility, convenience, comfort, reliability and safety (Ngatia, Fumihiko & Toshiyuki, 2010). Commuter satisfaction is linked to the image or perception by commuters. Due to that, commuter image on metro trains might be determined by the accessibility and availability of the metro trains most of the time and on public holidays in the evening, as well as the comfort of service with the objective of influencing commuter satisfaction (Govender 2014:323). If these areas are unsatisfactory, commuters will not have a positive image of a metro train service such as the Gautrain, leading to dissatisfaction. Therefore, the following hypothesis is put forward:

H2: *Perceived image of the Gautrain has a positive influence on commuter satisfaction.*

3.3. Perceived safety climate and commuter satisfaction

Safety climate has a positive influence on customer satisfaction due to its effect of reducing workplace accidents with the objective of offering payoffs in relation with customer experience (Yule, 2003). To this degree, employees are normally trained to interact with customers in order to explore how the safety climate may impact on customer satisfaction (Willis, Brown & Prussia, 2012). Paul (2012) states that without a satisfactory safety climate, the action of employees may impact negatively on the safety of commuters, thereby causing dissatisfaction. Based on that notion, safety climate is taken as a predictor of commuter satisfaction (Willis *et al.*, 2012). It is important then for transport companies to consider and apply safety measures as this may produce other benefits associated with the ability of the

labour force to influence commuter satisfaction. Accordingly, this study hypothesises that:

H3: *Perceived safety climate of the Gautrain has a positive influence on commuter satisfaction*

3.4. Commuter satisfaction and commuter loyalty

In order for a commuter to be loyal toward the service that he or she receives, it is important that s/he be satisfied. Satisfaction occurs when the commuter evaluates the perceived discrepancy between prior expectations and actual performance of the service (Tse & Wilton, 2012). This implies that commuter satisfaction and commuter loyalty cannot be separated, because the formation of commuter or customer loyalty includes a series of customers' (now the commuter) judgments and experiences from the service that he or she receives (Rai & Medha, 2013). A study by Wicks and Roethlein (2009) demonstrated that a business that constantly satisfies its customers enjoys greater retention levels and bigger profitability due to increased commuter loyalty. Titko and Lace (2010) also argue that the direct result of commuter satisfaction is loyalty. Based on what has been explained, the association between commuter satisfaction and commuter loyalty is taken to be applicable to the Gautrain scenario, in the sense that commuter satisfaction leads to commuter loyalty. Thus, the following hypothesis is proposed:

H4: *Gautrain commuter satisfaction has a positive influence on commuter loyalty*

4. RESEARCH METHODOLOGY

4.1. Measurement instruments

Research scales were designed on the basis of previous work. Proper modifications were made in order to fit the current research context and purpose. Customer Loyalty was measured using five-item scales adapted from Noyan and Simsek (2013). Perceived safety' used a five-item scale measure adapted from Willis, Brown and Prussia (2012). Perceived convenience used a five-item scale measure adapted from Orel and Kara (2014).

Customer satisfaction was measured using a five-item scale, from Lewin (2009). Measurement scales were configured on a five-point Likert-type scale that was anchored by 1 (strongly disagree) to 5 (strongly agree) in order to express the degree of agreement.

4.2. Sample description

A total of 500 questionnaires were distributed to different Gautrain users in the Gauteng Province in South Africa during weekdays in March 2015. A total of were distributed, 285 questionnaires were returned of which only 260 were usable. This yielded

a valid response rate of about 52%. Descriptive statistics in Table 1 show the gender, marital status, and age of employees.

As indicated in Table 1, this study shows that males constituted 53% of the total respondents. In terms of the age groups of respondents, individuals were less than 30 years of age were the greatest number (49%) in the study, followed by those aged between 31 and 60 (43%). Respondents who are married constituted 25% of the sample while those who were single which constituted 75% of the sample.

Table 1. Sample demographic characteristics

Gender	Frequency	Percentage
Male	110	53%
Female	96	47%
Total	206	100%
Age	Frequency	Percentage
≤30	100	49%
31-60	88	43%
≥ 60	18	8%
Total	206	100%
Marital status	Frequency	Percentage
Married	51	25%
Single	155	75%
Total	206	100%

4.3. Psychometric Properties of the Measurement Scale

Psychometric properties of the measurement scale are reported in Table 2, which presents the research constructs, Cronbach alpha test, composite reliability (CR), Average variance extracted (AVE) and item loadings.

The lowest item to total loading observed was GI 1 with 0.525 and the highest was CL4 with 0.929. The lowest factor loading observed was 0.537 and the highest is 0.950. This shows that the measurement instruments are valid. The lowest Cronbach alpha was 0.660 and the highest was 0.893 which shows that the constructs were internally consistent or reliable and explained more than 60% of the variance. All composite reliability values were above the recommended minimum of 0.7 (Bagozzi & Yi 1988), which further attests to the reliability of the measurement instrument used in the study. One of the methods used to ascertain the discriminant validity of the research constructs was the evaluation of whether the correlations among latent

constructs were less than 0.60. These results are reported in Table 3.

A correlation value between constructs of less than 0.60 is recommended in the empirical literature to confirm the existence of discriminant validity (Bagozzi & Yi, 1988). As can be observed from Table 3, all the correlations were below the acceptable level of 0.60. The diagonal values in bold are the Shared Variances (SV) for the respective research constructs. The Shared Variance is expected to be greater than the correlation coefficients of the corresponding research constructs. Drawing from Table 2 and 3 above, the results further confirm the existence of discriminant validity. To ascertain convergent validity, the factor loadings were considered in order to assess if they were above the recommended minimum value of 0.5 (Nunnally & Bernstein, 1994). The factor loadings for scale items (Table 2) were above the recommended 0.5, which indicated that the instruments were valid and converging well on the constructs that they were expected to measure.

Table 2. Measurement Accuracy Assessment and Descriptive Statistics

Research constructs	Descriptive statistics*		Cronbach's test		C.R.	AVE	Item Loadings
	Mean	SD	Item-total	α Value			
Gautrain Convenience (GC)							
GC 2	2.60	1.177	0.901	0.893	0.892	0.709	0.904
GC 3			0.823				0.845
Gautrain Image (GI)							
GI 1	2.01	1.072	0.525	0.660	0.755	0.569	0.537
GI 2			0.809				0.812
GI 3			0.583				0.586
GI 4			0.917				0.821
Gautrain Satisfaction (GS)							
GS1	3.15	1.007	0.763	0.702	0.701	0.665	0.799

Research constructs	Descriptive statistics*		Cronbach's test		C.R.	AVE	Item Loadings
	Mean	SD	Item-total	α Value			
GS2			0.743				0.759
GS3			0.631				0.664
GS4			0.622				0.641
Customer Satisfaction (CS)							
CS1	3.08	1.367	0.815	0.799	0.799	0.643	0.819
CS2			0.833				0.849
CS3			0.839				0.856
CS5			0.657				0.661
Customer Loyalty (CL)							
CL1	3.03	1.300	0.691	0.780	0.776	0.722	0.694
CL2			0.556				0.579
CL3			0.602				0.606
CL4			0.929				0.950
CL5			0.855				0.863

GC= Perceived Gautrain Convenience; GI= Perceived Gautrain Image; GS= Perceived Gautrain Safety; CS= Customer Satisfaction; CL= Customer Loyalty

Table 3. Inter-Construct Correlation Matrix

Variables	CL	CS	GC	GI	GS
CL	0.600				
CS	0.554	0.598			
GC	0.523	0.560	0.438		
GI	0.473	0.523	0.443	0.565	
GS	0.378	0.375	0.297	0.549	0.592

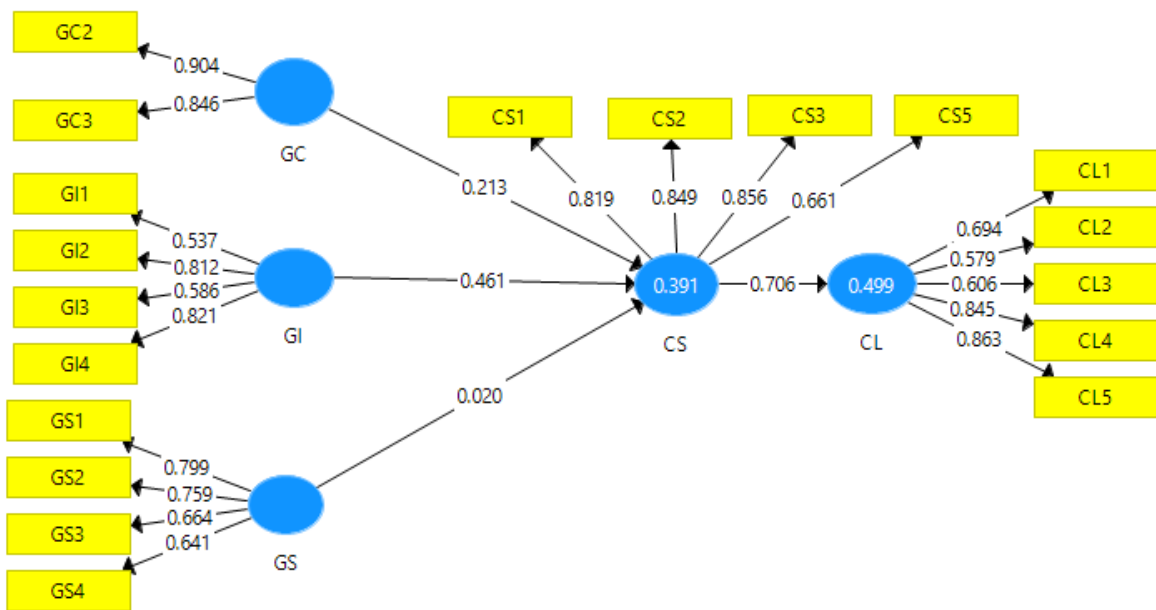
GC= Perceived Gautrain Convenience; GI= Perceived Gautrain Image; GS= Perceived Gautrain Safety; CS= Customer Satisfaction; CL= Customer Loyalty

4.4. Path Modelling Results:

After confirming the reliability and validity of the measurement instruments (reported in Table 2), the study proceeded to test the proposed hypotheses. In total there are four hypotheses that are tested. In the path model, Perceived Gautrain Convenience (GC), Perceived Gautrain Image (GI) and Perceived Gautrain Safety (GS) are the predictor variables.

Commuter Satisfaction (CS) and Commuter Loyalty (CL) are the outcome/dependent variables. Figure 2 provides the proposed hypotheses and the respective path coefficients. The same results of the path coefficients are tabulated in Table 2 depicting the Item to Total correlations, Average variance extracted (AVE), Composite Reliability (CR) and Factor Loadings.

Figure 2. Path Modelling and Factor Loading Results



4.5. Path model results and factor loadings

Below is Figure 2, indicating the path modelling results and as well as the item loadings for the research constructs. In the figure, GC stands for Perceived Gautrain Convenience; GI stands for Perceived Gautrain Image; GS is the acronym for Perceived Gautrain Safety; CS stands for Customer Satisfaction; and CL is the acronym for Customer Loyalty.

After running the data on the Smart PLS software, three items (GC1, GC4 and GC5) on the

perceived Gautrain convenience scale were deleted due to the fact that the factor loadings were below 0.5 which is the recommended minimum threshold. With regards to perceived Gautrain image, one item (GI5) was deleted and in terms of perceived Gautrain safety, one item (GS5) was deleted because the factor loadings were below the cut-off point which is 0.5. With reference to customer satisfaction, one item (CS4) was also deleted because its factor loading was below 0.5. Based on these results, the decisions made on the hypotheses are summarised in Table 4.

Table 4. Results of structural equation model analysis

Path	Hypothesis	Path coefficients (β)	T- Statistics	Decision on Hypotheses
Perceived Gautrain Convenience (GC) \rightarrow Customer Satisfaction (CS)	H1	0.315 ^a	6.659	Accept/ Significant
Perceived Gautrain Image (GI) \rightarrow Customer Satisfaction (CS)	H2	0.458 ^a	10.610	Accept/ Significant
Perceived Gautrain Safety (GS) \rightarrow Customer Satisfaction (CS)	H3	0.223 ^a	3.143	Accept/ Significant
Customer Satisfaction (CS) \rightarrow Customer Loyalty (CL)	H4	0.534 ^a	12.989	Accept/ Significant

^aSignificance Level $p < .10$; ^bSignificance Level $p < .05$; ^cSignificance Level $p < .01$

Table 4 presents the four hypothesised relationships, path coefficients, the t-statistics and the decision criteria. The value of the t-statistic indicates whether the relationship is significant or not. A significant relationship is expected to have a t-statistics that is above 2. Drawing from the results provided in Table 4, four of the hypothesised relationships (H1, H2, H3 and H4) were statistically significant.

5. DISCUSSION

The purpose of this paper was to examine the causal relationships between perceived convenience, perceived image, perceived climate safety, commuter satisfaction and commuter loyalty in the Gautrain in public transportation service in South Africa. The first hypothesis stated that perceived convenience of the Gautrain has a positive influence on customer satisfaction. In this study, this hypothesis was supported. It can be observed in Figure 2 and Table 4 that perceived Gautrain convenience exerted a positive influence ($r = 0.315$) and was statistically significant ($t = 6.659$) in predicting customer satisfaction. This result implies that perceived Gautrain convenience directly influence customer satisfaction in a positive and significant fashion. The higher the level of perceived Gautrain convenience the higher the level of satisfaction that commuters experience.

The second hypothesis suggested that perceived image of the Gautrain has a positive influence on customer satisfaction. This hypothesis was supported in this study. Figure 1 and Table 4, indicate that perceived Gautrain image H2 was supported. Perceived Gautrain image exerted a positive influence ($r = 0.458$) on customer satisfaction and was statistically significant ($t = 10.610$). This result denotes that perceived Gautrain image is positively and significantly related to customer satisfaction. Thus higher levels of perceived Gautrain image will lead to higher levels of customer satisfaction.

The third hypothesis, which advanced that perceived Gautrain safety exerts a positive influence on customer satisfaction was supported and accepted in this study. It is reported in Figure 1 and Table 4 that H3 perceived Gautrain safety exerts a positive ($r = 0.223$) influence on customer satisfaction and that this influence is statistically significant ($t = 3.413$). This result suggests that Gautrain safety has a direct positive effect on customer satisfaction. Thus, the more effective the perceived Gautrain safety, the greater the satisfaction of commuters. The final hypothesis postulated that customer satisfaction exerts a positive influence on customer loyalty. In this study, this hypothesis was supported and accepted. As can be deduced from Figure 1 and Table 4, customer satisfaction exerted a positive and significant influence ($r = 0.534$; $t = 12.989$) on customer loyalty. This result depicts that customer satisfaction is associated with higher customer loyalty.

Perceived Gautrain image ($r = 0.458$) emerged as the highest scoring construct amongst the three factors influencing customer satisfaction. Perhaps, this result could be attributed to the fact that most users of the Gautrain are image conscious in the sense that their use of this utility portrays a certain image amongst them. As shown by a previous study conducted by Musakwa (2014), Gautrain is highly priced in such a way that only middle class and upper class individuals can afford to use it on a regular basis. This depicts that it is possible that this cohort of commuters have the potential of deserting the Gautrain should the current price regime be reversed to permit low income earners to use it. Comins (2013) further reports on the increase in materialism amongst black South Africans, who form the bulk of the users of Gautrain. This is significant, since materialism, image and status typically go hand in hand (Ngong, 2009). In other words, use of the Gautrain is associated with a certain status, and this possibly makes image a more important factor than convenience and safety. After all, both convenience and safety can be taken as sub-constructs of image since they both lead to the improvement of image. Thus, in order to enhance

customer satisfaction, greater emphasis should be placed on perceived image than on perceived convenience and perceived safety climate.

6. LIMITATIONS AND FUTURE RESEARCH DIRECTION

A number of limitations were observed during this research. First, the study was restricted to five factors only; namely perceived convenience, perceived image, perceived safety, customer satisfaction and customer loyalty form the perception of the commuters. Future research could also include the perceptions of Gautrain employees as well. This could provide a basis for comparing the views of both commuters and employees. Second, the results are based on a small sample of 206 respondents, which makes it difficult to generalise the results to other contexts of mass rapid rail transit systems. Future studies could make use of amplified sample sizes in order to get more representative views. Additionally, there was insufficient literature on most of the constructs especially in the area of public transportation. Since this study used a quantitative approach, future studies could also use a mixed method approach so that in depth views of commuters can also be captured.

7. CONCLUSIONS AND MANAGERIAL IMPLICATIONS

The study validates that factors such as perceived convenience, image and safety are instrumental stimulating the satisfaction of users of mass rapid rail transit systems such as the Gautrain in South Africa. The study further validates that commuters using such a services are bound to stay loyal as long as they are satisfied with the rendered service. In addition, perceived image has a stronger impact on commuters of mass rapid rail transit systems when compared to perceived convenience and perceived safety.

The study has both theoretical and managerial implications. Theoretically, this study makes a noteworthy progression in marketing theory by methodically examining the interplay between perceived convenience, image and safety, customer satisfaction and loyalty. In this manner, the study is an important contributor to the existing literature on this subject. The study also underwrites a new direction in the research on consumer behaviour by opening up a discussion on the importance of marketing practices in the development and improvement of mass rapid rail transit systems in developing countries such as South Africa.

On the practical front, since perceived convenience, image and safety climate were exerted a positive influence on customer satisfaction, improvements in each of these three factors could stimulate higher customer satisfaction with the Gautrain. Perceived convenience can be improved by, among other things, expanding the use of the Gautrain to the rest of South Africa so that the service may be enjoyed by people in all regions of South Africa. The number of stations could be improved to ensure that the distance travelled by commuters on their way to board the Gautrain may be reduced. In addition, the frequency of the

Gautrain could be improved by increasing the number of locomotives so that the train is available at every station within periods less than ten minutes, for example. Free Wi-Fi could also be made available inside the cabins for the convenience of commuters. To increase its perceived image, more focused advertising is necessary which broadcasts the benefits of using the Gautrain. Whilst it is acknowledged that there is sufficient parking bays for cars in Gautrain, the number should be improved so that no Gautrain commuter experiences challenges related to the shortage of parking. Promotional packages such as free tickets could be made available as this will also improve the perceived image of the Gautrain amongst users, prompting those who are not using it currently to try it. To increase perceived safety, cash transactions could be discouraged, so that most users can purchase tickets online or by card, which gives them less chances of getting nabbed. Security could also be strengthened within the trains, such as through the physical presence of security details as well as the remote monitoring of events through closed circuit television (cctv).

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