An exploratory study on Buyer's behaviour while purchasing a helmet in the Saurashtra region

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Abstract

According to Section 129 of the Motor Vehicles Act, 1998, "Every person, above four years of age, driving or riding a motorcycle of any class or description, shall, while in a public place, wear protective headgear conforming to the Bureau of Indian Standards. The Two-wheeler automobile market of India is one of the most competitive markets in the world and also has emerged as one of the largest automobile markets in the world. In the current paper, an attempt has been made to examine various factors that affect the buying behaviour of consumers while selecting a helmet. Primary data was collected from people of different ages, occupations, gender and etc. of the Saurashtra region through a structured questionnaire and further data were analysed using various statistical tools to derive a meaningful conclusion. So this study of consumer purchasing behavior will help everybody as all are consumers and so it is essential for a marketer to understand which factors affect the most for the consumer while they purchase the helmet. And this will help the marketer to formulate different marketing strategies.

Keywords: Bureau of Indian standards, consumer, buying behavior, helmet, marketing strategies.

INTRODUCTION

The marketing concept is consumer, placing a greater emphasis on the consumer than the product. Modern marketing focuses on increasing profits while somehow satisfying customers, whose wants and preferences must be in line with the diversity of goods and production plans. As a result, the effectiveness of marketing rests on its capacity to foster a group of gratified customers. The business operations should satisfy customer needs.

A variety of factors influence consumer behaviour, comprising personal and professional interests, attitudes and beliefs, personality traits, social, economic, and cultural background, age, gender, professional standing, and numerous social forces from friends, family, colleagues, and the wider community. A combination of all these factors helps the buyers in decision-making. Moreover, Individual consumer needs, motivations, perceptions, attitudes, learning mechanisms, and personality traits are examples of psychological aspects that work in general across different kinds of individuals and affect behaviour.

With the help of 180 samples of customers who either wished to buy a helmet or were already using that one, a study on "Buyer's Behavior While Purchasing a Helmet in Saurashtra Region" was done. Data were gathered through structured questionnaires.

The marketing concept begins and ends with the consumer. The most important goal of a business enterprise is to satisfy the consumers. Understanding consumer behaviour, preferences, dislikes, expectations, and driving forces is key to ensuring customer happiness. It is particularly helpful to analyse customer behaviour in terms of consumption patterns, preferences, motivations, buying processes, and purchase behaviour while developing a company's marketing plan.

So the final objective of a business firm is to develop a consumer who is said to be the centre around whom the entire business of a firm revolves.

The marketing concepts are majorly consumer-oriented and hence stress more on the consumer rather than on the product. A consumer's decision to purchase a particular brand of helmets mostly relies on the shape of the product, promotion, and price and distribution strategy.

MAJOR FACTORS INFLUENCING BUYING BEHAVIOR

Many factors are responsible for buyer behaviour. Consumer behaviour refers to the selection, purchase and consumption of goods and services for the satisfaction of their demands. Different processes are involved in consumer behaviour. Firstly consumer tries to search what commodities he would like to consume, then he selects only those commodities that promise greater benefits. After selecting the commodities according to the available money which can be spent, the consumer makes an estimation. Last but not least, the customer evaluates the current prices of goods and decides which goods he should buy. Meanwhile, a number of other factors, such as marketing, interpersonal, social, cultural, personal, and psychological ones, affect customer purchases.

Marketing Factors: Each element of the market mix – product, pricing, promotion and place has the potential to affect the buying process at various stages.

Personal Factors: The personal factors of a consumer may affect the buying decisions. Personal factors include age factor, gender, education, income -level, Status' in Society and other personal factors such as personality, lifestyle, family size, etc., which influence consumer behaviour.

Psychological Factors: A person's buying behaviour is influenced by psychological factors such as learning, attitudes, motives, perception and beliefs.

Situational Influences: Major situational influences include the physical surroundings, social surroundings, time, the nature of the task, and monetary moods and conditions.

Social Factors: Social factors such as reference groups, family, friend circle, role and social status affect buying behaviour.

Cultural Factors: Culture includes race and religion, tradition, caste, moral values, etc. Culture also includes sub-cultures such as sub-caste, religious Sects, languages, etc.

Although each individual's behaviour toward the purchasing process is unique, certain things have an impact on all of them. These impacts could be environmental, social, psychological, or even personal. However, cultural values are shared by all members of society and gradually

change over time. Additionally, depending on whatever group a person belongs to, society has distinct effects on that person's behaviour. Each user's impacts differ depending on their age, sex, perception, motivation, and learning processes. Those variables affect consumer purchasing decisions, so they must be taken into account. The most crucial elements in the consumer market are the consumers themselves, who make decisions. The local consumer behaviour in a market that a company seeks to penetrate is probably different from the client behaviour they deal with in their home country. Therefore, it is crucial that the marketing manager takes all these variables into account, assisting them in creating marketing campaigns for the worldwide market and improving the product to completely satisfy the customer, which ultimately leads to an increase in sales and global development.

All about HELMET:

A type of protective equipment worn to protect the head is a helmet. In order to protect the human brain, a helmet specifically cooperates only with the skull. Helmets are useful as safety devices to avoid a crash in an uncontrolled environment. A helmet can prevent or reduce damage to the head and brain if you can't avoid a crash or hit but you know it will happen.

We must repeatedly stress that reducing the likelihood of colliding or being hit is the first step in harm prevention. Avoiding hitting something is much better than hitting it while wearing a helmet.

Did you realise that you also need to buy a helmet when you buy a two-wheeler? So it is stated in the Central Motor Vehicle Rules. However, it doesn't appear that many two-wheeler dealers or buyers are aware of this.

When a two-wheeler is purchased, the manufacturer is required to provide protective headgear that complies with the specifications established by the Bureau of Indian Standards under the Bureau of Indian Standards Act, 1986, in accordance with Section 138(4) (F) of the Central Motor Vehicles Rule.

What are the helmet-related traffic laws in India?

In order to protect the community's legal safety, the Motor Vehicles Act of 1988 was established. It has undergone numerous revisions throughout time to include more provisions and strengthen compliance.

The most recent Motor Vehicles Amendment Act of 2019 added 63 new clauses that enhanced the fines for a variety of traffic infractions. Unsafe driving behaviours included not wearing a helmet.

Every person above the age of 4 must "wear protective headgear" when riding a motorcycle in a public place, according to Section 129 of this main Act. As was already established, both the driver and pillion rider are subject to these motorcycle helmet restrictions.

These regulations also demand particular criteria for the headgear or helmet to be used. These are:

- As per Section 129(a), a helmet must be built with such materials in such a shape that will provide the maximum level of injury protection in the event of an accident.
- According to Section 129(b), the helmet must be secured to the rider's or driver's head with powerful fasteners, such as straps affixed to it. This ensures that the wearer's protective headgear won't come off in the event of an accident.
- Motorcycle riders who violate the preceding laws may be subject to Section 194D of this Act punishment of Rs. 1000 for failing to wear a helmet. Additionally, this traffic violation includes a three-month licence termination penalty.

REVIEW OF LITERATURE

This paper by (**Ali et al., 2011**) helmet use behaviour in an attempt to identify influential factors. Based on the results, 56 out of all the respondents (43.1%) had a history of accidents by motorcycle. Of these motorcycle riders, only 10.7% were wearing their helmet at the time of their accident.

(**Dandona et al., 2006**), In India two-wheel vehicle account for a large proportion of road traffic in India and the riders of these vehicles have a high risk of road traffic injuries. Data suggest the need to enact and enforce policy interventions for improving the driver's license system, mandatory use of a helmet, effective traffic law enforcement, and ensuring good vehicle conditions to reduce the risk factors that potentially contribute to mortality and morbidity in road traffic crashes.

Motorcycle helmet-wearing rates remain low in smaller cities in developing countries. (**Li, L. P et al., 2008**), therefore examined the knowledge, attitudes, and behaviour of motorcyclists towards helmet use in two mid-sized cities in China. Through roadside observation and interviews, A large proportion of both drivers and passengers did not wear a helmet or did not have their helmets fastened.

Humans adapt their risk-taking behaviour on the basis of perceptions of safety. Existing studies by (Gamble, T., & Walker, I. 2016) looked at people who know they are using safety equipment and have specifically focused on changes in behaviours for which that equipment might reduce risk. The results suggest that unconscious activation of safety-related concepts primes globally increased risk propensity.

Mathur, A. K., Gupta, S., & Bandhu, A. (2017), Head injuries during the crash are the main cause of death and disability so based on a baseline study was conducted by researchers to understand the pattern of helmet use in all 7 administrative divisional headquarters of the state of Rajasthan in 2015. Among 1, 17,553 two-wheelers observed, almost two-fifths of drivers (39.4%) wore helmets correctly, whereas, less than three-fifths (58.7%) did not. An almost equal percentage of males (58.6%) and females (58.9%) did not wear a helmet at all.

This was a quasi-experimental study conducted in three phases conducted by (**Peltzer, K., & Pengpid, S. 2014**). Motorcyclists were selected by simple random sampling and they were assigned to either the intervention or control group. A comparison was done in terms of group driver education versus no education, and pre- versus post-intervention. Out of an estimated 500 male drivers, 407 participated in the study. The control group showed no significant changes. Post-license road safety education significantly improved knowledge but not self-reported adherence to speed limits.

(Karuppanagounder, K., & Vijayan, A. V. 2016). In order to evaluate the factors influencing helmet use, including motorcycle riders' attitudes, the primary goal of this study is to look at the patterns of motorcycle helmet use in Calicut, India. In order to ascertain the helmet use rate among motorcyclists and pillion riders, a field study was carried out. Additionally, a structured questionnaire interview survey of 709 motorcyclists was carried out to ascertain the users' perceptions and attitudes surrounding the use of motorcycle helmets. A researcher discovered during the study that using a helmet as a protective device is preferable to doing so only when the helmet regulation is strictly enforced.

(Bachani, A. M. et al., 2012), Road traffic injuries (RTIs) are a leading cause of disability and fatality in middle-income countries. The observation was made by the author, the proportion of helmet-wearing across all study sites was 25 per cent at night and 43 per cent during the day among all motorcyclists in Cambodia. Almost 60 percent of respondents said that their use or non-use of a helmet depended on where they were driving. Helmet quality, price, style, and colour were important factors influencing the decision to purchase a helmet.

Article by (**J Edu Health Promot 2019**) Determinants of helmet use among healthcare providers in urban India: Leveraging the theory of planned behaviour: The aims of the study were (1) to determine the proportion of proper use of helmets and (2) to identify TPB-related factors and other factors influencing the use of helmets. The outcome of this research study is stated that the factors such as helmet quality, price, style, and colour as important influencing factors in the decision to purchase a helmet. There are many factors affecting the use of a helmet. Attitude, intention and subjective norms are the other factors which influence consumer buying behavior.

ADILLA PONGYEELA, (2018) .In this study author found that the motorcycle driver should be aware of helmet as well as he studied the behaviour of the helmet buyer & also how much risk is there if they does not wear helmet. Outcome of the study is that Females are more aware about helmet.

Researchers (Yu, W. Y. et al., 2011) carried out a case-control study to investigate how various helmet designs and incorrect helmet usage impacted Taiwanese motorcyclists' ability to prevent head injuries. According to the study's findings, motorcycle riders had the least protection against head injuries when wearing half-coverage helmets. Additionally, wearing a helmet that isn't securely attached.

(Bianchi, G. et al., 2011). The aim of this study is to examine the correlation between helmet use and on-slope ski Conduct. Three categories of people were identified: 1. Helmet wearers, 2. those who do not wear a helmet but intend to buy one, and 3. those who do not wear a helmet and have no intention of buying one by the researcher.

(Dr. Raj A. Jesu Kulandai, & Prof. Kaviarasu S. John, 2015) found in his study that the Indian two wheeler motorcycle industry is expanding and growing up each year. The study discovers that buying behaviour of two-wheelers in Chennai city is significantly influenced by a number of marketing stimuli offered by the manufacturers. It also reveals the people from low and middle class prefer two wheeler as it matches with their individual and family requirements. Majority of the respondents have claimed that Fuel-efficient, reliable brand and availability of spare parts are the most preferential factors for buying g of a two wheeler.

The study of (**Dr. Ronald Mani & Mr. Debasis Tripathy 2013**) is centred on the purchasing behaviour of the customer that provokes them to buy the two wheeler bike. The promotion was an exceptionally affecting variable for the Bajaj two wheeler customers, family members were exceedingly impacting element for the Honda two wheeler customers and friends were profoundly impacting component for the Yamaha two wheeler customers. Most influencing factor is Design for Yamaha followed by Bajaj, Honda, Hero MotoCorp and TVS. Mileage as an influencing factor was dominated among motor bike owners of Bajaj and Hero MotoCorp. For Yamaha bike owner's speed and technology was the influencing factor to purchase.

(M. Sathish & A. Pughazhend, 2011) have conducted the study to understand customer purchasing reasons and how they behave around two-wheelers. Customers' choices are heavily influenced by their needs, purchasing power, and the cost of the two-wheeler goods. Despite their lack of purchasing power, buyers are most likely to favour expensive motorcycles since they are more likely to have the advanced characteristics they desire, such as aesthetic appeal and value enhancement. The research report advises the two-wheeler companies to provide clients new models and distinctive designs. It has been shown that consumers prefer two-wheelers due to their utility and ease of control in busy, unpredictable traffic.

NEED OF THE STUDY: Buyer Behavior while purchasing and using are playing a remarkable role for preventing head injuries during road accidents and task for company growth in modern-day exhibit circumstances. Main aim is to increase helmet use and may need to focus on the strategies that strengthen motorcyclist's plans and objectives to helmet use.

RESEARCH OBJECTIVES

- i) To know the usage of helmets among two wheeler drivers.
- ii) To Know Key reasons for buying a helmet.
- iii) To identify the factors or parameters influencing at the time of purchasing decision.

RESEARCH METHODOLOGY:

219 | ISBN: 978-93-5768-327-2

The present study employs the exploratory research approach to evaluate the extent of the impact factor and establish association between consumers' purchase behaviour towards the helmet in saurashtra region of Gujarat. The population for this study was all consumers of the market who make are planning to purchases, already user and they had used of helmet. The entire sample size of 180 respondents—104 men and 76 women from the Saurashtra region—was chosen using the convenience sampling method. Both the primary and secondary data collection methods were considered.

However, primary data was gathered from the respondents with the help of pre-tested structured closed ended questionnaires. However, using pre-tested structured, closed-ended questions, primary data was gathered from the respondents. Secondary data sources, such as papers on the subject from journals, books, and the internet, have been used to support the primary data. The responses of the measurement were analysed using a 5- point Likert scale. The measuring items of the variables were designed based on the literature review. The relationships between hypotheses were examined using cross-tabulation and chi-square analytical tools. Analyses of data and testing of hypotheses were performed using SPSS version 17. The analyses have been in conformity with the objective and the hypotheses of the study.

HYPOTHESIS FOR THE STUDY

In exploring the relationship between consumers 'buying behavior and helmet, the study addressed the following hypotheses;

➤ **H01:** Reasons for buying a helmet is independent of gender.

Ha1: Reasons for buying a helmet is dependent on gender.

► **H02:** Reasons for buying a helmet is independent of age.

Ha2: Reasons for buying a helmet is dependent on age.

H03: Reasons for buying a helmet is independent of educational level of consumer.

Ha3: Reasons for buying a helmet is dependent on educational level of consumer.

RESULTS AND DISCUSSION

220 | ISBN: 978-93-5768-327-2

Table 1 displays consumer demographics, with the majority of respondents (57.8%) being male and the age range of 18 to 30 years represented (56.7%). Additionally, the majority of them (57.22%) are Rajkot's urban region, and 45% and 41.1% have graduate degrees. The majority of them (40.56%) identify as professionals. Consumer from rural areas is plainly visible as having a low level of helmet use.

Table 1: Demographic Characteristics of Respondents						
Demographic Factors		Labels	n = 180	%		
4	Gender	Male	104	57.8		
1		Female	76	42.2		
2	Age	18 - 30 years	102	56.7		
		30 - 40 years	43	23.9		

		40 -50 years	30	16.7
		50 - 60 years	3	1.7
		60 years and above	2	1.1
		Rajkot	103	57.22
			15	8.33
		Morbi		
3	City	Junagadh	29	16.11
		Porbandar	16	8.89
		Jamnagar	13	7.22
		Other	4	2.22
		Urban	103	57.22
4	Area	Semi Urban 54		30.00
		Rural	23	12.78
		School Level	11	6.11
_	Educational	Graduation	81	45.00
5	Qualification	Post-Graduation	74	41.11
		Doctorate	14	7.78
		Professional	73	40.56
		Business	42	23.33
6	Occupations	Housewife	15	8.33
		Student	48	26.67
		Retired	2	1.11

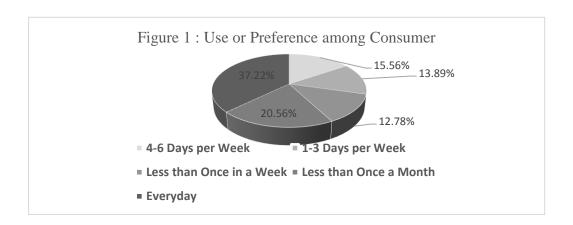
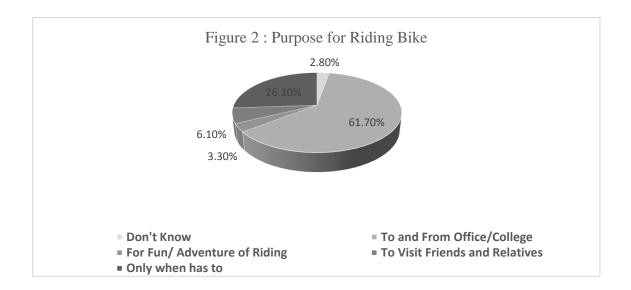
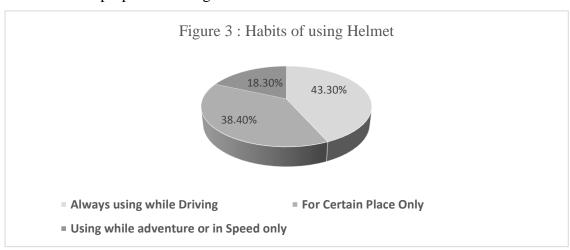


Figure 1 shows that 37.22% of consumers prefer to wear helmets every day, 20.56% wear them 4-6 days per week, 15.56% wear them less than once per month, 13.89% wear them for 1-3 days in a week, and 12.78% wear them less frequently means once in a week.



From figure 2 we can conclude that 61.70% of people use bike to go to office/college, this shows they are professional or have higher education, 26.10% uses when there is a need, 6.10% uses it to visit friends and relatives, 3.30% uses it for fun or adventure, 2.80% of them don't know their purpose of riding.



According to figure 3 it is found that 43.30% of public have habit to wear helmet while driving, 38.40% have the habit to wear helmet only at certain places, while remaining 18.30% use helmet when they drive for adventure purpose.

Figure 4 shows that when buying a helmet, the majority of buyers prioritise comfort. They then look at the ISI mark on the helmet, durability, the helmet's ejection process, warranty or guarantee, availability on the market, price, brand name, gender-specific colour schemes, and finally the helmet's design.

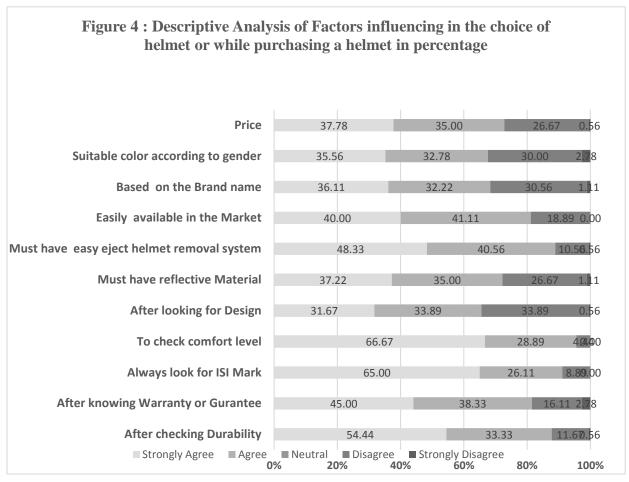


Table 2 H01: Reasons for buying a helmet is independent of gender.					
					Ha1: Reasons for buying a helmet is dependent on gender.
Reasons for buying a helmet	Chi- P		Significance	Hypothesis	
	Square	Value			
Helmet only use for safety				Null Hypothesis	
purpose	8.044 ^a	0.045	Yes	Rejected	
due to legal requirement				Null Hypothesis	
	10.396 ^a	0.015	Yes	Rejected	
After being influencing by				Fail to reject null	
friends or family member	4.979 ^a	0.173	No	hypothesis	
Health benefits				Fail to reject null	
	2.319 ^a	0.509	No	hypothesis	
Escape yourself from paying				Fail to reject null	
penalty or fines	5.176 ^a	0.159	No	hypothesis	
To ensure better control of				Fail to reject null	
your vehicle while driving	.965a	0.810	No	hypothesis	

According to table 2, only two reasons for purchasing a helmet—using it for safety reasons and because it is required by law—depend on a consumer's gender. Other considerations, such as family and friend's pressure, health benefits, avoiding fines or penalties, and improving vehicle control while driving, can all be considered as they are dependent on gender. In the context of Saurashtra, it indicated that purchasing a helmet was planned due to legal and safety requirements. While other factors have little influence on a consumer's intention to purchase.

Table 3				
H02: Reasons for buying a helmet is independent of age.				
Ha2: Reasons for buying a helmet is dependent on age.				
		P		
Reason for Buying Helmet	Chi-Square	Value	Significance	Hypothesis
Helmet only use for safety				Fail to reject null
purpose	14.740 ^a	0.256	No	hypothesis
				Fail to reject null
due to legal requirement	10.589 ^a	0.564	No	hypothesis
After being influencing by				Fail to reject null
friends or family member	4.979 ^a	0.406	No	hypothesis
				Fail to reject null
Health benefits	12.848 ^a	0.380	No	hypothesis
Escape yourself from paying				Fail to reject null
penalty or fines	7.686 ^a	0.809	No	hypothesis
To ensure better control of your				Fail to reject null
vehicle while driving	6.045 ^a	0.914	No	hypothesis

Table 3 shows that all of the justifications for reason for buying a helmet—using it for safety reasons, using it because it's required by law, because friends or family members convinced you to, for health reasons, to avoid fines or penalties, or to improve vehicle control while driving—can all be ruled out as null hypotheses. In the context of Saurashtra, it suggests that customer purchasing behaviour for helmets is unaffected by age.

Table 4 shows that all of the justifications for reason for buying a helmet—using it for safety reasons, using it because it's required by law, because friends or family members convinced you to, for health reasons, to avoid fines or penalties, or to improve vehicle control while driving—can all be ruled out as null hypotheses. In the context of Saurashtra, it suggests that customer purchasing behaviour for helmets is unaffected by educational level of consumer.

POSSIBLE OUTCOME AND APPLICATIONS:

This study is basically concerned with consumer buying behaviour towards helmet. The basic objective behind caring this study is to consumer purchasing behaviour i.e. (helmet) of different

type of customer in different area of Saurashtra. To study the various factor affecting the customer buying pattern in case of helmet and to search out new prospects for helmet industry. It will assist the government in creating or establishing helmet regulations.

Table 4				
H03: Reasons for buying a helmet is independent of educational level of consumer.				
Ha3: Reasons for buying a helmet is dependent on educational level of consumer.				
Reasons for buying a helmet	Chi-	P	Significance	Hypothesis
	Square	Value		
Helmet only use for safety purpose	17.147 ^a	0.046	Yes	Null Hypothesis
				Rejected
due to legal requirement	8.866 ^a	0.450	No	Fail to reject null
				hypothesis
After being influencing by friends	4.384 ^a	0.884	No	Fail to reject null
or family member				hypothesis
Health benefits	11.804 ^a	0.225	No	Fail to reject null
				hypothesis
Escape yourself from paying	8.422a	0.492	No	Fail to reject null
penalty or fines				hypothesis
To ensure better control of your	23.963 ^a	0.004	Yes	Null Hypothesis
vehicle while driving				Rejected

Demographic variables reveal ongoing trends such as shifts in age and income distribution; that signals business opportunity to alert marketers. In view of such situation, the researcher is wanted to find out which factors possibly influence the buying behaviour of customers with purchasing helmet.

Marketers are interested in the number of household that own or buy a certain product and who the customer or buyer is. They then try to aim the marketing strategy at the buyer so as to influence consumer decision making.

LIMITATIONS OF THE STUDY:

225 | ISBN: 978-93-5768-327-2

- 1. Consumer behavior is very difficult to predict.
- 2. This study was successfully carried out but not without limitations. The first limitation was that, the sampling could not cover most of the consumer who are actually using helmet.
- 3. Secondly, the questions in the questionnaire could be designed more skilfully.
- 4. The majority of the participants were youth and high level of education (college education). Thus, the results may not generalize to the other populations.
- 5. The sample size was relatively low, which may reduce the power of conducted analysis.

- 6. Geographical concentration is limited to Saurashtra REGION of Gujarat so may not be representative of the whole population of India.
- 7. Scope for future studies, it is recommended that the behaviour be determined by a score of few questions.
- 8. There is no guarantee of your life after meeting with an accident despite using helmet.

CONCLUSION

By using a sample of 180 respondents, this study sought to determine how consumers in the Saurashtra region purchased helmets. This research basically examines why people wear or buy helmets: for safety reasons, to comply with legal requirements, because friends or family persuaded them to, for health reasons, to avoid fines or other consequences, or to enhance vehicle control while driving. Results shows that when buying a helmet, the majority of buyers prioritise comfort. They then look at the ISI mark on the helmet, durability, the helmet's ejection process, warranty or guarantee, availability on the market, price, brand name, gender-specific colour schemes, and finally the helmet's design. The rate of helmet use among motorcycle riders was quite low, with 43.30% of the general public in Gujrat's Saurashtra region reporting a tendency of wearing it while driving. The majority of graduates, postgraduates, and professionals opted to wear helmets. Lastly, the researcher wants to draw the conclusion that consumer behaviour while purchasing a helmet is unaffected by age, gender, and education levels.

REFERENCES

- 1. Ali, M., Saeed, M. M. S., Ali, M. M., & Haidar, N. (2011). Determinants of helmet use behaviour among employed motorcycle riders in Yazd, Iran based on theory of planned behaviour. *Injury*, 42(9), 864-869.
- 2. Dandona, R., Kumar, G. A., & Dandona, L. (2006). Risky behavior of drivers of motorized two wheeled vehicles in India. Journal of safety research, 37(2), 149-158.
- 3. Mathur, A. K., Gupta, S., & Bandhu, A. (2017). A baseline study on pattern of helmet use in the state of Rajasthan, India. *Journal of Health Management*, 19(3), 417-434.
- 4. Gamble, T., & Walker, I. (2016). Wearing a bicycle helmet can increase risk taking and sensation seeking in adults. Psychological science, 27(2), 289-294.
- 5. Peltzer, K., & Pengpid, S. (2014). Helmet use and associated factors among motorcyclists in the Association of Southeast Asian Nations: Prevalence and effect of interventions. *African Safety Promotion: A Journal of Injury and Violence Prevention*, 12(1), 72-86
- 6. Karuppanagounder, K., & Vijayan, A. V. (2016). Motorcycle helmet use in Calicut, India: User behaviors, attitudes, and perceptions. *Traffic injury prevention*, 17(3), 292-296.

- 7. Bachani, A. M., Tran, N. T., Sann, S., Ballesteros, M. F., Gnim, C., Ou, A., & Hyder, A. A. (2012). Helmet use among motorcyclists in Cambodia: a survey of use, knowledge, attitudes, and practices. Traffic injury prevention, 13(sup1), 31-36.
- 8. Yu, W. Y., Chen, C. Y., Chiu, W. T., & Lin, M. R. (2011). Effectiveness of different types of motorcycle helmets and effects of their improper use on head injuries. International journal of epidemiology, 40(3), 794-803.
- 9. Bianchi, G., Brügger, O., Niemann, S., & Cavegn, M. (2011). Helmet use and self-reported risk taking in skiing and snowboarding (Vol. 18). ASTM International
- 10. Raj, A., & Kaviarasu, S. J. (2015). Household Characteristics and Buying Behavior of Two-wheeler Consumers in Chennai City-A Study. *Asian Journal of Research in Business Economics and Management*, 5(4), 109-121.
- 11. Witte, K., Stokols, D., Ituarte, P., & Schneider, M. (1993). Witte, K., Stokols, D., Ituarte, P., & Schneider, M. (1993). Testing the health belief model in a field study to promote bicycle safety helmets. *Communication Research*, 20(4), 564-586.
- 12. Jagtap, M. V. (2018). An analytical study of factors influencing customer buying behaviour of two wheelers and their impact on pre and post sales practices of selected two wheeler companies in pune city (Doctoral dissertation, Tilak Maharashtra Vidyapeeth).

WEBSITE:

- 13. https://www.godigit.com/motor-insurance/two-wheelerinsurance/helmets/helmet-laws-in-india
- 14. https://www.thehindu.com/news/cities/chennai/demand-a-helmet-while-buying-a-bike/article7349210.ece
- 15. https://www.irdai.gov.in/