Prevalence and Association Factors of Customer Satisfaction on Lubricant Product Enol

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ABSTRACT

Background: Customer satisfaction is crucial for business success, influencing loyalty and revenue. Enol Lubricants, a leading brand in Nepal, focuses on cost reduction, profit maximization, and customer satisfaction. However, limited research exists on customer perceptions of its products and services. The objective of this study is to find the prevalence and associated factors of lubricant product Enol.

Method: An analytical cross-sectional study was conducted to assess customer satisfaction with ENOL lubricants across retail outlets in Chitwan, Gorkha, Tanahu, Lamjung, and Nawalpur. The study examined how service quality dimensions (tangibility, reliability, responsiveness, assurance, and empathy) influence satisfaction. Data was collected through structured questionnaires from 152 customers using purposive sampling, with satisfaction categorized as poor or good. SPSS was used for analysis. p-value of <0.05 was considered significant.

Results: Among 152 respondents, the majority were aged 25-35 years (34.2%), 86.2% were male, and 78.3% were married. Most respondents (91.4%) were employed, with 44.1% earning between 20,000 and 50,000, and 59.9% had some high school education. Regarding location, 77% were from urban areas. In terms of satisfaction, 67.8% reported good satisfaction, while 32.2% reported poor satisfaction. The study found no statistically significant associations between satisfaction and sociodemographic variables (p-value > 0.05).

Conclusion: The study on customer satisfaction with Enol lubricant found that the majority of respondents were satisfied with the product. However, no significant relationship was observed between satisfaction and sociodemographic factors such as age, gender, marital status, income, or education.

Keywords: Customer satisfaction, Tangibility, Reliability, Responsiveness, Assurance, Empathy.

INTRODUCTION

A customer is an individual or business that purchases goods or services. Customers are vital as they generate revenue, without which businesses cannot survive. Companies compete to attract customers through advertising, pricing strategies, and unique offerings (Paas & Kuijlen, 2001). Customer satisfaction, a key marketing concept, measures how well a company's products and services meet expectations. Defined as "the number of customers whose shared experience with a firm, its products, or its kindness exceeds specified satisfaction goals," customer satisfaction is crucial for business success(Anderson et al., 1994). It is a key performance indicator, often included in a balanced scorecard, and a primary differentiator in competitive markets. According to Gregory Liotti, "A satisfied customer is one who will continue to buy from you, seldom shop around, refer cost, and, in general, be a superstar advocate for your business"(Abd Razak et al., 2023). Enol Lubricants, located in Jhapa district, manufactures a wide range of lubricating oils and greases for automotive and industrial applications. Committed to serving from Mechi to Mahakali, the company collaborates with Asian Lubricants Company Pvt. Ltd. and has gained customer trust since 2015. As one of Nepal's leading lubricant brands, Enol Lubricants prioritizes minimizing costs, maximizing profits, and ensuring customer satisfaction. Customer satisfaction is critical in the competitive lubricant industry, where product performance and service quality influence loyalty(Ocen et al., 2015; Pradhan, 2015). Key factors include tangibility, reliability, assurance, responsiveness, and empathy. Despite Enol Lubricants' market growth, limited research exists on customer perceptions of its product and service quality.

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The lubricant industry, particularly ENOL lubricant products, has seen limited research on customer satisfaction, unlike sectors like retail and hospitality, which are extensively studied (Parasuraman et al., 1988). Existing literature rarely examines how demographic factors like age, gender, and education influence customer perceptions of product quality and service. This research gap underscores the need for a focused study that evaluates customer satisfaction through attributes like reliability, responsiveness, and empathy, while considering demographic variations. Addressing this gap will offer valuable insights for both academics and industry practitioners. This study examines the determinants of customer satisfaction with Enol Lubricants in Chitwan, Gorkha, Tanahu, Lamjung, and Nawalpur. It explores demographic influences on satisfaction levels and evaluates product attributes, including tangibility, reliability, assurance, responsiveness, and empathy, to enhance overall satisfaction.

METHOD

An analytical cross-sectional study was conducted on customer satisfaction with lubricant products, particularly examining how dimensions of service quality (tangibility, reliability, responsiveness, assurance, and empathy) influence satisfaction. The research was conducted across retail outlets selling lubricant products in Chitwan, Gorkha, Tanahu, Lamjung, and Nawalpur. This broad geographic area helps capture a diverse customer base and purchase behaviors, enabling the study to assess customer satisfaction in various retail markets and understand how individual retail outlets impact overall satisfaction. The target population includes regular customers of ENOL lubricants, such as general consumers and mechanics who handle the products. The study focuses on retail counters, garages, and newly opened lubricant outlets in the selected regions. Customer satisfaction was the dependent variable and categorized as poor or good based on the mean value of responses. The independent variables were the five dimensions of service quality from the SERVQUAL model: tangibility, reliability, responsiveness, assurance, and empathy, all of which influence customer satisfaction. Primary data was collected through a structured questionnaire. Surveys were conducted physically among customers. The calculated sample size of this study was 152 and they were selected using non-probability (purposive) sampling techniques to select customers for data collection. Data analysis was performed using SPSS software. Descriptive statistics were used to profile demographic characteristics (age, gender) and satisfaction levels, while inferential statistics were used to find the association between level of satisfaction with selected sociodemographic variables. P-value<0.05 was considered as statistically significant.

RESULT

Among 152 respondents, 15.1% of the respondents were between 18-25 years old, 34.2% were between 25-35, 23% were between 35-45, 21.7% were between 45-55, and 5.9% were between the ages of 55-68. This shows that most customers are in the 25-35 age range. Regarding gender, 86.2% are male and 13.8% are female. In terms of marital status, 78.3% of the respondents were married, while 21.7% were unmarried. On job status 91.4% are employed, compared to 8.6% who are unemployed. Regarding income, 14.5% earned between 10,000 and 20,000, 44.1% earned between 20,000 and 50,000, 21.1% earned between 50,000 and 90,000, and 8.6% earned above 90,000. Furthermore, 11.8% did not disclose their income. This indicates that most customers earn between 20,000 and 50,000. Regarding education, 8.6% had no formal education, 59.9% had some high school education, 28.3% held a bachelor's degree, and 3.3% had a master's degree. Finally, 23% of the respondents were from rural areas, while 77% were from urban areas (Table 1).

Regarding the overall level of satisfaction 32.2% respondents were poor while 67.8% reported good satisfaction (with 95% confidence interval 60.37% to 75.22%) (Table 2).

In the 18-25 age group, 65.2% reported satisfaction, while 34.8% were dissatisfied, with satisfaction levels

Table 1. Sociodemographic Information of the Respondents (n=152)

Sociodemographic variable	Frequency (%)
Age	
18-25	23(15.1)
25-35	52(34.2)
35-45	35(23)
45-55	33(21.7)
55-68	9(5.9)
Sex	
Male	131(86.2)
Female	21(13.8)
Ethnicity	
Brahmin/Chhetri	97(63.8)
Dalit/janajati	11(7.2)
Newar	18(11.8)
Terai caste	18(11.8)
Others	8(5.3)
Religion	
Hinduism	139(91.4)
Buddhism	2(1.3)
Christianity	11(7.2)
Marital status	
Married	119(78.3)
Unmarried	33(21.7)
Job	
Employed	139(91.4)
Unemployed	13(8.6)
Level of income	
10000-20000	22(14.5)
20000-50000	67(44.1)
50000-90000	32(21.1)
over 90000	13(8.6)
Prefer not to say	18(11.8)
Level of education	
No formal Edu	13(8.6)
Some high school	91(59.9)
Bachelor	43(28.3)
Maters	5(3.3)
Place of residence	
Rural	35(23)
Urban	117(77)

increasing in older age groups, though dissatisfaction remains prominent in the 55-68 age range at 56.6%. Among males, 65.6% were satisfied compared to 81%

Table 2. Level of Satisfaction of the Respondents on Lubricant Product Enol

Level of Satisfaction	Frequency(%)	95% CI	
		Lower	Upper
Poor	49(32.2)		
Good	103(67.8)	60.37	75.22

of females, with lower dissatisfaction rates among females (19%). Married individuals showed 66.4% satisfaction, while unmarried respondents had 72.7% satisfaction. Employed individuals had a higher satisfaction rate (69.8%) compared to the unemployed (46.2%). Satisfaction also varied with income, with those earning between 0-20,000 showing the highest satisfaction (76.2%), while those earning 50,000-90,000 reported the lowest (62.5%). Educationally, satisfaction was highest among those with no formal education and high school qualifications (69.2%) and lowest among master's degree holders (60%). Rural respondents had a higher dissatisfaction rate (40%) than urban respondents (29.9%). None of the variables were found to be statistically insignificant (p-value>0.05) (Table 3).

DISCUSSION

Out of 152 participants, the majority (34.2%) were aged 25–35 years, 86.2% were male, and 78.3% were married. Most respondents (91.4%) were employed, with 44.1% earning between 20,000 and 50,000, and 59.9% having attained some high school education. Geographically, 77% resided in urban areas. Regarding satisfaction levels, 67.8% expressed good satisfaction, while 32.2% reported poor satisfaction. The analysis revealed no statistically significant relationships between satisfaction and sociodemographic factors (p-value > 0.05). While another study showed that, brand equity positively impacts customer satisfaction, with a beta coefficient of 0.370 and a significance level of 0.000. These findings indicate that brand equity plays a significant role in influencing customer satisfaction, as customers perceive it as a key factor contributing to their satisfaction with lubricants. This result aligns with previous research by (Ghezelbash & Khodadadi, 2017). Additionally, the study found that brand equity

continued to show a positive influence on customer satisfaction, with a beta coefficient of 0.321 and a significance level of 0.000. Furthermore, price and promotion were also shown to have positive effects, with beta coefficients of 0.139 (p = 0.012) and 0.132 (p = 0.004), respectively (Youthao & Songsiriworakul, 2022). While another study conducted in Malaysia critical role of service quality and customer engagement in fostering customer loyalty within Malaysia's automotive lubricant e-commerce sector, particularly in a VUCA environment influenced by rapid market changes, COVID-19, and increasing internet penetration. Through a quantitative analysis of 274 respondents using JASP, the research identifies

Table 3. Association Between Level of Satisfaction with Selected Sociodemographic Variables

Sociodemographic Variable	Level of satisfaction		Chi square	p-value
	Poor	Good		
Age				
18-25	8(34.8)	15(65.2)		
25-35	12(23.1)	40(76.9)		
35-45	11(31.4)	24(68.6)	5.09	0.278
45-55	13(39.4)	20(60.6)		
55-68	5(56.6)	4(44.4)		
Sex				
Male	45(34.4)	86(65.6)	1.94	0.164
Female	4(19)	17(81)		
Ethnicity				
Brahmin/Chhetri	30(30.9)	67(69.1)		
Dalit/Janajati	2(18.2)	9(81.8)		
Newar	8(44.4)	10(55.6)	2.41	0.661
Terai/Madhesi	6(33.3)	12(66.7)		
Others	3(37.5)	5(62.5)		
Religion				
Buddhism	1(50)	1(50)		
Christianity	4(36.4)	7(63.6)	0.396	0.82
Hinduism	44(31.70	95(68.3)		
Marital status				
married	40(33.6)	79(66.4)	0.475	0.49
Unmarried	9(27.3)	24(72.7)		
Job status				
Employed	42(30.2)	97(69.8)	3.039	0.081
Unemployed	7(53.8)	6(46.2)		
Level of income				
0-20000	5(23.8)	17(76.2)		
20000-50000	23(34.3)	44(65.7)		
50000-90000	12(37.5)	20(62.5)	2.208	0.82
Over 90000	3(23.1)	10(76.9)		
Prefer not to say	6(33.3)	12(66.7)		
Level of education				
No formal Edu	4(30.8)	9(69.2)		
Some high school	28(30.8)	63(69.2)	0.378	0.945
Bachelor	15(34.9)	28(65.1)		
Maters	2(40)	3(60)		
Place of residence				
Rural	14(40)	21(60)	1.254	0.263
Urban	35(29.9)	82(70.1)		

key determinants that businesses can leverage to adapt to complex consumer behaviors and unpredictable market dynamics. The findings provide actionable recommendations for companies to enhance customer loyalty, build strong brand advocacy, and achieve sustainable competitive advantages in the evolving e-commerce landscape (Saidon et al., 2023)

CONCLUSION

The research on customer satisfaction with the lubricant product Enol reveals insightful findings. The majority of the respondents were young adults, predominantly male, and married, with a significant portion being employed and having a high school education. Most of the participants were from urban areas and earned an income within the moderate range. A majority of the respondents expressed satisfaction with the product, indicating a positive reception among consumers. However, despite the overall satisfaction, no significant relationship was found between customer satisfaction and sociodemographic factors such as age, gender, marital status, employment, income, and education level. This suggests that factors other than sociodemographic characteristics may play a more crucial role in shaping customer satisfaction with Enol. Further studies exploring other variables that influence satisfaction and consumer behavior could provide a deeper understanding of

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