Modelling the Factors Affecting Consumerism among Urban Household Consumers in Nakuru County, Kenya

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Abstract
Consumerism has been defined as a social movement seeking to augment the rights and powers of consumers in relation to sellers (Kotler, 2000). The rise of consumerism in Kenya has been marked by registration Consumers Federation of Kenya (COFEK) and enactment of consumer laws including the Competition Act 2010 and Consumer Protection Act 2012. However, despite these institutional developments, consumerism has not yet picked up momentum to the desired levels in the country among Kenyan consumers. Most consumers in Kenya, majority of who are vulnerable, still remain disorganized and uninformed and often unsuspectingly fall prey to fraudulent practices in the market. Kenyan consumers have been exposed to poor quality of goods and services in the marketplace ranging from food to medicines to services (Asher & Rijit, 2012). Again, the consumers' response to calls for nationwide protests organized by COFEK in 2011 (dubbed "Unga" revolution), 2010 and 2008 over rising cost of living in Kenya were too low to achieve much in the marketplace. The purpose of the study was to develop a model of factors affecting consumerism among urban household consumers in Nakuru County, Kenya. The study was premised on Smelser's (1963) theory of collective behaviour which stipulates that structural conduciveness, strains, generalized beliefs, precipitation, mobilization into action and social control influence consumerism in a society. The study adopted a descriptive research design involving a mixed method approach. A sample size of 400 respondents was drawn from 10 administrative sub-locations in Nakuru East and Nakuru West sub counties of Nakuru County. Multi-stage cluster sampling technique was used for selecting households for the study. A pre-designed self-administered questionnaire was used for data collection. The model was constructed using linear regression analysis with the aid of SPSS (version 19.0) and Stata (version 13.0) software. The model was tested for linearity, collinearity, normality and homoskedasticity assumptions in OLS (Ordinary least squares). The study found out that 17.6 % of the variation in consumerism was significantly explained by consumer rights awareness, attitudes towards marketing practices and consumer discontent. The results of OLS assumption tests confirmed normal distribution in the data; evidence of linearity, absence of multicollinearity and presence of heteroskedasticity in the model.
Keywords: Consumer rights awareness, attitude towards marketing practices, consumer discontent, Consumerism

Introduction
Consumerism has been a primary concern of developed countries where consumer protection is quite advanced. It has been defined as a social movement seeking to augment the rights and powers of consumers in relation to sellers (Kotler, 2000). Following Smelser's (1963) work, Kotler (1972) names six factors leading to rise of consumerism as structural conduciveness, structural strains, growth of a generalized belief, precipitating factors, mobilization for action and social control. Structural conduciveness refers to characteristics that permit or create the potential for the formation of a consumer movement. It includes advances in income and education, growth of technology, exploitation of the environment and disparities between the quality of local and exported products. Consumerism is among the fastest-growing social movements in Africa, where the marketplace has been a seller's haven. It has emerged as an issue of considerable importance affecting consumer decisions in the marketplace. The rise of consumerism in Kenya has been marked by registration Consumers Federation of Kenya (COFEK) and enactment of Competition Act 2010 and Consumer Protection Act 2012. However, despite these institutional developments, consumerism has not yet picked up momentum to the desired levels in the country. Most consumers in Kenya, majority of who are vulnerable, still remain disorganized and uninformed and often unsuspectingly fall prey to fraudulent practices in the market. Kenyan consumers have been exposed to poor quality of goods and services in the marketplace ranging from food to medicines to services (Asher & Rijit, 2012). Again, the consumers' response to calls for nationwide protests organized by COFEK in 2011 (dubbed "Unga" revolution), 2010 and 2008 over rising cost of living in Kenya were too low to achieve much in the marketplace. Based on the findings of a study conducted among urban household consumers in Nakuru County, Kenya, on the effects of consumer rights awareness, attitudes towards marketing practices and consumer discontent on consumerism a regression model was constructed. The model provides empirical analysis that may be used for recommending effective policies for further boosting consumerism in Kenya.

Literature Review
Consumerism in the study refers to the level of utilization of established consumer protection mechanisms, the

level of involvement and participation in the consumer movement. McIlhenny (1990) defines consumerism as "a citizens' movement which will make broad-reaching social, ecological and political demands on suppliers of goods and services". Maynes (1990) defines consumerism as "the voicing of consumer discontent and the furtherance of corrective actions". Kotler (2000) defines the consumerist movement "as an organized movement of citizens and government to strengthen the powers of buyers in relation to sellers". In a third-world perspective, it is defined as "the efforts made either by the consumer himself, the government, and/or independent organizations to protect the consumer from the unscrupulous practices of businesses in their quest for profit" (Onah, 1979). The concept of consumerism was elaborated by Abplanalp (2009) as a new socio economic and cultural trend which celebrates consumer individuality and unique personality, and consequently, companies have no option but to respond and recognize positively to this emerging consumer concerns. Eze, Eluwa and Nwobodo (2010) reported that there is a global recognition of the fact that there exists real and perceived imbalance of power relations between the producers and consumers of goods and services. This imbalance of power in general appears always to the advantage of the producers. According to Ali and Wisniesk (2010), Companies have to invest heavily in advertising their products to meet and stimulate consumer demands with various products categories because consumers are no longer passive actors; rather they have become independent and active force in shaping events in market place and influencing corporations' market and non-market decisions

Oko and Osuagwu (2013) examined the variables that challenge the growth and development of consumerism in Nigeria. The study further investigated the factors that spur consumerism activities in Nigeria with a particular focus on the food and drink industry for the period 1980-2012. The study involved 485 consumers who were selected from the 6 geo-political zones in Nigeria regions to ensure good representation. Likert scales questionnaires and oral interviews were used for data collection. The study found out that the main reasons for low level of consumerism activities include absence of competition in the food and drink industry, unbalanced purchasing attitudes of Nigerians, low level of awareness and consciousness, high level of poverty, absence of quality market force (consumer) leadership, lopsided media activities and lack of government commitment. The study concluded that there was need to catalyze consumerism activities in Nigeria given the lack of will power among consumers to take action. Causes of this inactive nature of the movement are majorly attributed to the existing high level of poverty among consumers, resulting to poor market force leadership and high level of class consciousness among consumers. The study recommended for introduction of consumer affairs departments by firms, implementation of consumer protection laws by government, judicious use of consumer sovereignty among firms, imposition of environmental protection tax and revocation of licences for firms conducting unbecoming business practices.

Halliru (2012) conducted an exploratory and conceptual study to assess the performance of agencies in charge of consumer rights protection on the basis of their statutory functions. The study which was conducted in Nassarawa, Kano state in Nigeria found out that most consumer agencies are below par in performance. This was due to very poor level of awareness among Nigerian consumers as well as reluctance of consumers to enforce their rights. This reluctance was found to be largely due to poor level of education among Nigerian consumers, unnecessarily rigid judicial system which protects the manufacturers and marketers, coupled with the non-committed attitude of the government towards protecting consumer rights. The study recommended that the government should ensure immediate establishment of Consumer Protection Council committees in all states of the federation as provided by the Act, enforce the use of warranties, and direct other agencies to vigorously create awareness and bring defaulting organizations to book.

Solaiman, Yasmin and Haque (2012) investigated the status and challenges of consumerism in Bangladesh. The study was based on a desk study and an empirical survey. The study focused on general environmental factors affecting development of consumerism in Bangladesh. It found out that the areas of consumer deception included adulteration, misbranding, deceptive packaging among others. The causes of exploitation included illiteracy, lack of consumer legislation, inflation and limited consumer choices among others. The findings indicated that 85% of the respondents had done nothing for consumerism while only 10% claimed to have done something for consumerism.

Ijewere and Obeki (2011) examined the level of activity of consumerism in relation to developed countries, identified the ways by which the Nigerian government and the civil society have attempted to protect the interests of consumers and critically examined the factors inhibiting the growth of consumerism in Nigeria. Using extant literature, the study found that consumerism in Nigeria was still at its infancy compared to the developed world. It also found out that the government and civil society were not doing enough to grow consumerism to its maturity. The study identified that low level of literacy, ignorance, government ownership of business, low level of import substitution, unpatriotic activities, poverty, dormancy of the press, unresponsive government, weak consumer associations and high cost of legal redress as being responsible for the slow growth and activity of consumerism in Nigeria. The study recommended that consumers' organizations in Nigeria should step up their activities by imitating the US and Britain where consumer organizations conduct

independent product tests, carry out independent consumer surveys, issue out product alerts, inform and educate consumers. It also suggested that the Nigerian government should fully implement consumer protection laws by promptly prosecuting offenders to serve as a deterrent to others. The findings contributed to knowledge by unveiling the factors against effective and efficient consumerism in the context of a developing country.

Onsongo (2011) found that there was a strong relationship between consumer behaviour and consumerism in Kenya. The study was conducted among 1500 consumers in Kisii County. The findings showed on one hand a positive correlation between knowledge of goods, consumer attitudes and consumerism and on the other hand a negative correlation between demographics, lifestyles and consumerism. Consumer behaviour indicators included high cost of living, personal feelings, belief, culture and sub culture, availability of goods, lack of information on consumer rights and changing lifestyle. Other findings indicated that 43% and 57% of the respondents either strongly agreed or agreed, respectively, that lack of information on consumer rights affected consumerism. 86% agreed that high cost of living affected consumerism. The study demonstrated that there was a link between lack of information among Kenyan consumers on consumer rights and consumerism which was further investigated in this study.

Isin (2011) examined the marketing manager's perception of consumerism in Turkey. The sample was drawn randomly from company information in the marketing Turkiye magazine. Questionnaires were sent to 250 firms via postal mail and 94 questionnaires were returned, yielding a response rate of 37%. The study found out that businesses have a positive attitude towards the consumers' supportive, regulatory and orientation roles of the state in consumerism. The study found out that marketing managers in Turkey have a positive attitude towards consumerism. It also revealed that the demographics of managers had no effect on the attitudes towards the regulatory role of the state, the activities of consumer organizations and consumerism. The study recommended that the government should encourage the business sector to support consumerism activity or introduce legislation to enforce compliance. It also recommended that government should undertake the crucial and important role of making consumers aware of business practices and consumerism issues in a country. The study emphasizes that consumer awareness of business practices and consumerism issues was crucial for consumerism to succeed. The findings of the study indicate that positive attitudes towards consumerism among businesses would enhance consumer protection and the growth of consumerism. It also suggested that both businesses and government play a crucial role towards the success of consumerism in a developing country.

Barda and Sardianou (2010) composed a profile of active consumers in Greece during a period of rising prices taking into account shifts in their consumption. The study found that the main factor which affected the reaction to price increases was the monthly private income. It also established that 20% of the consumers who supported actions against rising prices were members of a national consumer movement organization. The results indicated that high-income groups spend more for food commodities and are less likely to be active consumers and that women were more likely to participate in economic boycotts than men. This supports the view that consumer demographic factors such as gender and income level are likely to affect consumerism activity in a give society. The study examined the profile of non-active consumers and the reasons for their behaviour and concluded that a policy for the activation of the Greek consumer movement was necessary. This study provided evidence that membership to a consumer organization can influence consumer activation. Such membership may raise awareness of consumer issues and encourage collective actions against issues that affect all consumers.

Ijewere (2007) investigated the level of consumer activism in Nigeria and how it has helped in protecting consumers in the marketplace. The study was conducted among 858 respondents in six major towns of Edo and Delta states of Nigeria. The six chosen towns included Benin, Auchi, Ekpoma, Warri, Asaba and Sapele. The level of individual consumer activism was measured by his/her willingness to join, finance, uphold decisions of the association, attend meetings and solicit for members on behalf of the association. Respondents were asked to indicate on a five point scale his or her willingness to participate in consumer activism ranging from certainly yes to certainly not. The results of the study revealed that although Nigerian consumers were naive and shy in voicing out their complaints about bad products, majority were willing to join a consumer association. The study recommended that manufacturers should set up consumer protection units in their organizations, government to encourage setting up of consumer associations by funding them and government to ensure that manufacturers produce quality products. The study contributed towards construction of a consumerism measurement scale. However, it focused on investigating the level of consumer activism and its impact on consumer protection and hence contributed little towards understanding the factors affecting consumerism.

Onah (1988) conducted a study on the factors leading to the rise of consumerism in Nigeria. The study found that the factors leading to rise of consumerism in Nigeria were; unscrupulous business practices involving sale of expired drugs/canned foods and adulterated products, scarcity of goods and services leading to high prices, better educated consumers, economic and social ills, deceptive promotions, hidden charges, sloppy service and unsafe or impure products, lack of self-discipline by business firms and reluctance on their part to enforce national and international laws relating to production and marketing of products and services. Among

other measures, Onah proposed that marketing firms in Nigeria in response to consumerism should: engage in honest and relevant advertising; ensure nutritional and ingredient labeling; deal with consumer complaints quickly; respond to inquiries and grievances; develop consumer educational programmes; establish consumer advisory committees; and establish of a consumer affairs and research department.

Stanton, Chandran and Lowenhar (1981) unveiled factors for and against consumerism in Brazil. The study which adopted the Kotlerian framework, confirmed consumerism in Brazil was at its infancy stage. The study revealed the factors against the rise of consumerism in Brazil as lack of free press, fatalism, strategic government intervention in some instances and lack of wide publicity. The study suggested that until the government realizes that consumerism is an expected and important adjunct to economic development, it will not encourage the business sector to support the consumer movement or introduce the legislation to force compliance. The study provides evidence that lack of wide publicity on consumer rights affects as an adjunct to the development of consumerism.

Purpose of the study
1. To develop a model of factors affecting consumerism among urban household consumers in Nakuru County, Kenya
2. To test the model for linearity, collinearity, normality and homoskedasticity assumptions in OLS (Ordinary least squares).

Methodology
A conceptual framework was developed to guide the study (see Figure 1). The framework indicated the relationships to be investigated and was used as a basis of specifying the linear regression model. *A regression model capable of explaining the largest possible variance in the dependent variable was generated for the study.* From the perceived relationship between the independent and dependent variables, the following linear functional relationship was constructed;

CONS= f (CRA, ATT, DISC)

From the function, the following Linear Regression model is specified;

CONS = β_0 + β_1 CRA + β_2 ATT + β_3 DISC + e

Where;

CONS	=	Consumerism
β_0	=	Constant
CRA	=	Consumer rights awareness
ATT	=	Attitudes towards marketing practices
DISC	=	Consumer discontent
e	=	error term

The error term represented the effect of variables that were omitted from the regression equation (Freedman, 2005). It represents the combined effect of the omitted variables assuming that;
a) the combined effect of the omitted variables is independent of each variable included in the equation;
b) the combined effect of the omitted variable is independent across subjects;
c) the combined effect of the omitted variables has expectation 0.

The target population consisted of 68,469 households in Nakuru West and Nakuru East sub-Counties of Nakuru County. Data was collected from a sample of 400 respondents whereby heads of households or any other adult present were interviewed. A multi-stage cluster sampling method was used for selecting the sample for the study. The study adopted a cross sectional descriptive research design. Secondary data was collected from published documents and academic journals while primary data was collected through a predesigned self administered structured questionnaire.

Conceptual framework
A conceptual framework is a visual or written product, one that explains graphically or in narrative form, the main things to be studied-the key factors, concepts or variables and presumed relationships among them (Miles, Huberman & Saldaña, 2013). The study hypothesized that consumer rights awareness, attitudes towards marketing practices and consumer discontent constructs (independent variables) affect consumerism tendencies among urban household consumers (dependent variable). It is based on the proposition that consumerism is a function of consumer rights awareness, attitudes towards marketing practices and consumer discontent. The diagram indicates that a direct linear relationship between the independent variables and the dependent variable was investigated (see Figure 1). It also proposed that consumer rights awareness, attitudes towards marketing practices and consumer discontent have both isolated and combined effects on consumerism tendencies among urban household consumers.
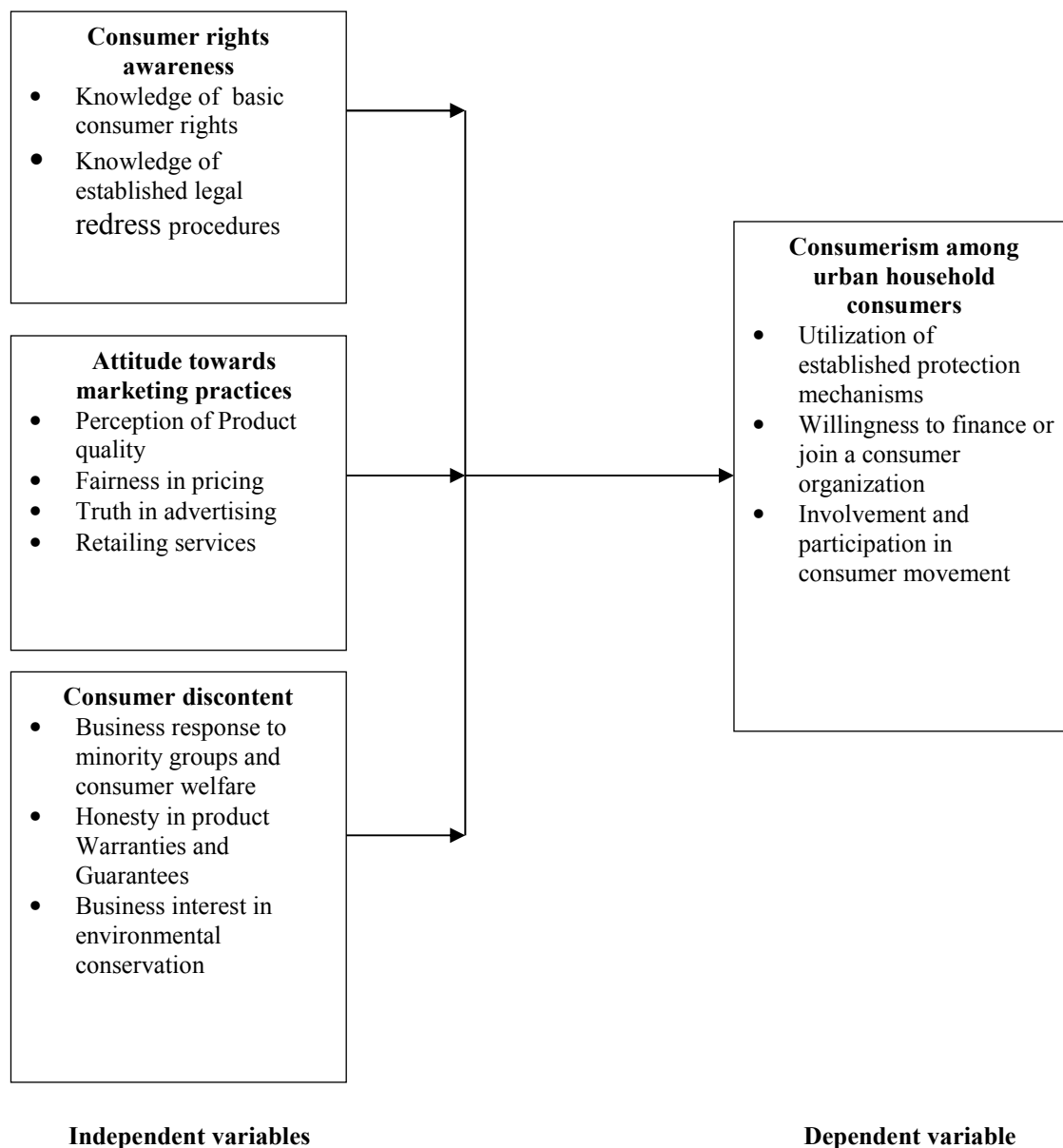
IISTE

Independent variables   Dependent variable

Figure 1: Conceptual framework

In order to test the relationships under investigation as presented in the conceptual framework, the variables were measured as discussed below;

Consumer rights awareness construct was operationalized into 10 items, 5 point likert scale based on statements drawn from consumer rights legislations in Kenya. The statements tested the knowledge of consumer rights as stipulated in the Competition Act 2010 and the Consumer Protection Act 2012 of Kenya. The construction of the instrument was guided by scales used for studying consumer awareness of consumer protection 2010 law in Serbia, scales which were used for measuring environmental health awareness in Egypt (Elsabawy, 2011) and scales that were used for measuring consumer awareness in Kenya (Rousseau & Venter, 1996). Statements labeled 1-4 focused on the basic consumer rights while the statements labeled 6-10 focused on complex consumer rights. By scoring against each of these statements the level of awareness for each respondent was captured by a total score. The respondents were asked to select and tick against column spaces that best described their opinion of each statement on a likert scale ranging from 5-strongly agree to 1-Strongly disagree. Using total scores, the level of consumer rights awareness for each respondent was rated from 50 (high awareness) to 10 (low awareness).

Attitude towards marketing practices construct was operationalized into a 15 multi-item likert scale with reference to Webster (1991) and Barnes and Kelloway (1980) scales. Webster's scales were used in the

study of attitudes towards marketing practices in the USA while Barnes and Kelloway scales were used in a study of attitudes towards consumer issues in Canada. The statements tested respondents' beliefs regarding various marketing practices that were categorized into product quality, pricing of products, advertising for products, retailing and marketing in general. Each of the statements in the categories examined the respondent's attitude towards the specific marketing practices including product quality, pricing of products, advertising, retailing and marketing in general. The instrument was modified to address the requirements of the study and local conditions in the country. The respondents were asked to score each of the 15 items on a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree. Using total scores, attitudes towards marketing practices for each respondent were rated from 75 (extremely favourable) to 15 (extremely unfavourable).

Consumer discontent construct was operationalized into a 10 item likert scale that was adopted and modified from Lundstrom and White (2006). The instrument was successfully used for measuring consumer discontent in the state of Mississippi, USA. The statements measured the level of dissatisfaction regarding business practices specifically business profits, responsiveness to minority groups, exploitation of natural resources, concern for consumer welfare, honesty in product guarantees and warrantees and interest in environmental conservation. The respondents were required to rate each statement on a 5-point likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The total score for each respondent indicated the level of discontent. This was rated from 50 (high discontent) to 10 (low discontent).

Consumerism construct was operationalized into a 9 items scale which were adopted and modified from Webb, Mohr and Harris (2007) and Mehta and Keng (1985) scales. The nine statements measured the efforts made by respondents in utilizing consumer protection mechanisms in terms of the actions taken when faced with a dissatisfactory product such as complaining to the retailer, advising friends and relatives, stopping purchases or filing court cases. It also measured willingness of the respondent to join a consumer organization, make financial contributions and willingness to participate in collective action. The respondents were asked to rate each statement on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Using total scores, level of consumerism for each respondent was rated from 45 (high consumerism) to 9 (low consumerism).

Results and Discussion
Regression model
In order to conduct a further analysis of the effects of consumer rights awareness, attitudes towards marketing and consumer discontent on consumerism among urban household consumers in Nakuru County, linear regression method was used. Beta coefficients were generated in the analysis and are presented in Table 1.

Table 1: Linear Regression output

Coefficients[a]

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	9.724	2.515		3.866	.000		
	CRA	.074	.050	.069	1.467	.143	.930	1.075
	ATTD	.084	.049	.090	1.733	.084	.762	1.312
	DISC	.355	.051	.357	6.948	.000	.783	1.277

a. Dependent Variable: CONS

From the linear regression output (see Table 1) the following linear regression model was specified;

CONS = 9.724 + 0.069 CRA + 0.090 ATT + 0.357 DISC

Where;

CONS = Consumerism;

CRA = Consumer rights awareness;

ATT = Attitudes towards marketing practices;

DISC = consumer discontent.

From the Beta values generated in the linear regression analysis, the relative predictive power of each independent variable on the dependent variable was analyzed. Consumer rights awareness was found to have a positive effect on consumerism among urban household consumers in Nakuru County since the Beta coefficient was positive. The Beta value for consumer rights awareness was β=0.069, indicating that it contributed 6.9% towards consumerism tendency among urban household consumers in Nakuru County.

Attitude towards marketing practices had a positive effect on consumerism among urban household consumers in Nakuru County since the Beta coefficient was positive. The Beta value was β=0.090, indicating that it contributed 9% towards consumerism tendency among urban household consumers in Nakuru County. Consumer discontent had a positive effect on consumerism among urban household consumers in Nakuru County since the Beta coefficient was positive. The Beta value for consumer discontent was β=0.357, indicating that it contributed 35.7% towards consumerism tendency among urban household consumers in Nakuru County.

A comparison of the Beta values for each independent variable revealed that consumer discontent had the highest predictive power ($\beta=0.357$) followed by consumer rights awareness ($\beta=0.069$) and attitudes towards marketing practices ($\beta=0.090$).

Table 2: Model summary

Model Summary[b]

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension0	1	.427[a]	.182	.176	4.53978

a. Predictors: (Constant), DISC, CRA, ATTD

b. Dependent Variable: CONS

The adjusted R-squared value or coefficient of determination was 0.176 (see Table 2), implying that consumer rights awareness, attitudes towards marketing practices and consumer discontent explained at least 17.6 % of variation in consumerism among urban household consumers. This means that 82.4% variation in consumerism tendencies among urban household consumers in Nakuru County remained unexplained by the model.

Table 3: ANOVA results

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1820.357	3	606.786	29.442	.000[a]
	Residual	8161.393	396	20.610		
	Total	9981.750	399			

a. Predictors: (Constant), DISC, CRA, ATT

b. Dependent Variable: CONS

The joint significance of the explanatory variables was tested through F test and p value approaches. The decision rules were to reject the null hypothesis that the impact of all explanatory variables is simultaneously equal to zero if the computed F value exceeds the critical F value or the P value ≤ significance level α (0.05). Since computed F value 29.442 (see Table 3) was greater than critical F value (2.627) and the computed p value of 0.000 was less than 0.05 (see Table 3), we reject the null hypothesis that the impact of all the explanatory variables was simultaneously equal to zero and conclude that consumer rights awareness, attitude towards marketing practices and consumer discontent had a simultaneous effect on consumerism. Hence, 18.2% of the variation in consumerism has been significantly explained by the three independent variables; consumer rights awareness, attitudes towards marketing practices and consumer discontent.

Having confirmed that the explanatory variables (consumer rights awareness, attitude towards marketing practices and consumer discontent) had a simultaneous impact on the dependent variable (consumerism), the model was tested for linearity, collinearity, normality and homoskedasticity assumptions in OLS (Ordinary least squares). The linearity assumption means that the amount of change or rates of change, between scores on two variables are constant for the entire range of scores for the variables. This assumption was confirmed by the P-P plot since the plotted points matched the diagonal line (see Figure 2). There was further evidence of linearity in the parameters in the residuals scatter plot since the amounts of points scattered above and below the 0-horizontal line were equal (see Figure 3).
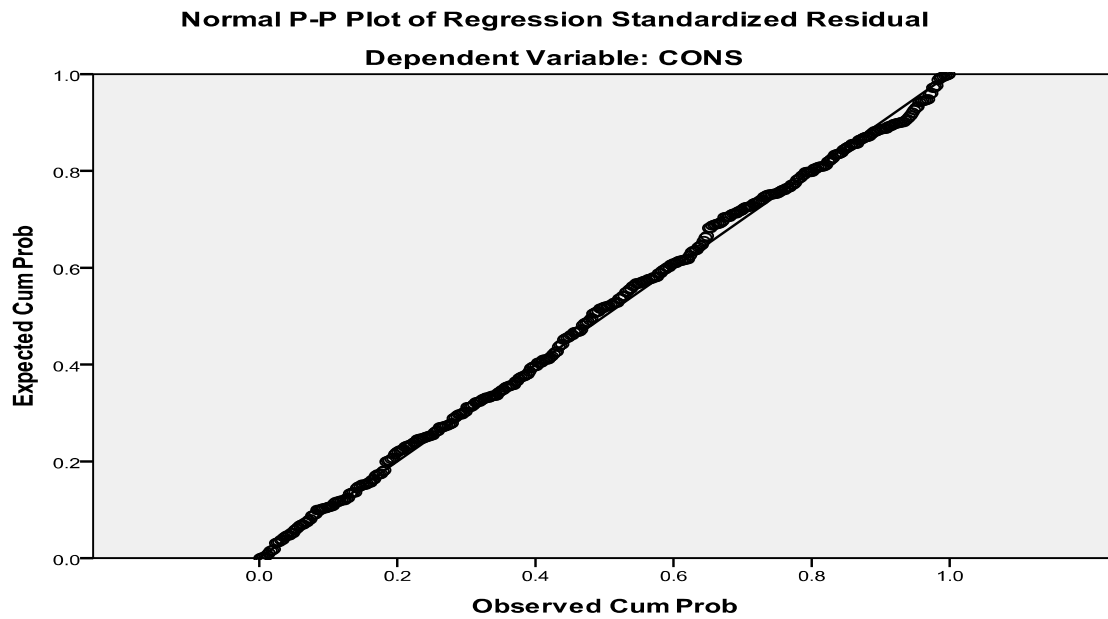
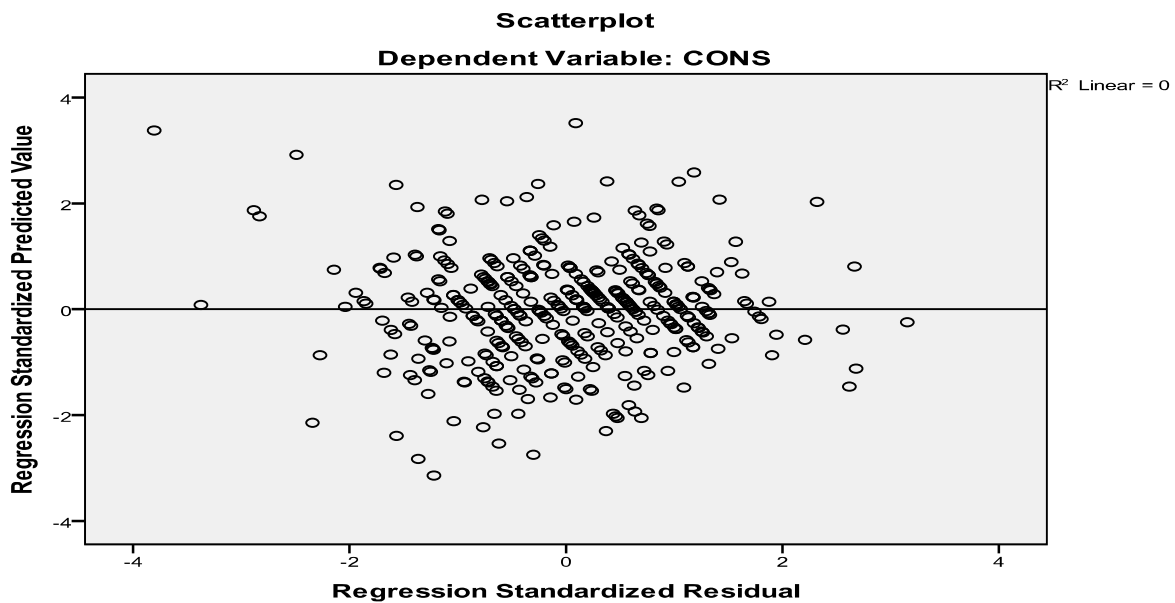**Figure 2: P-P plot of regression standardized residuals**

Figure 3: Residuals scatter plot

The collinearity assumption means that the independent variables should not be inter-correlated. Multicollinearity occurs when more than two predictor variables (e.g., X_1, X_2 and X_3) are inter-correlated. In the study, multicollinearity was tested using Tolerance statistics and Variable Inflation Factor (VIF) generated in the linear regression output (see Table 1). The tolerance statistics for the first variable was 0.93 which means that 7% of the variance in the consumer rights awareness was shared with the other independent variables. The tolerance statistics for the second variable was 0.762 which means that 23.8% of the variance in attitudes towards marketing practices was shared with the other independent variables. The tolerance statistics for the third variable was 0.783 which means that 21.7% of the variance in the consumer discontent was shared with the other independent variables. Since tolerance statistics was above 0.2 for all the independent variables then there is sufficient evidence that the predictive factors were not inter-correlated. Multicollinearity was also assessed using the Variable Inflation factor (VIF). The VIF values for all the predictors were below 5, indicating absence of multicollinearity. According to Rogerson (2001), VIF values of below 5 indicate no evidence for multicollinearity.

The absence of heteroskedasticity assumption or homoskedasticity assumption means that the variance of the error terms should be constant, that is, the variance of the error term does not depend on the value of

independent variables. Its presence affects the efficiency of the OLS model. There was evidence of heteroskedasticity after graph inspecting of the residuals scatter plot (see Figure 3). To test the presence of heteroskedasticity in the data, Breusch-Pagan/Cook-Weisberg test was done with the aid of Stata (version 13.0) statistical software. The null hypothesis (H_0=constant variance variables) was tested. The decision rule was to reject the null hypothesis when calculated p value is greater than 0.05. The result was a p-value of 0.0096 which was less than alpha value of 0.05 (see Table 4). Hence, we reject the null hypothesis of constant variance variables and conclude that there was presence of heteroskedasticity in the data which is a common phenomenon in cross sectional studies.

Table 4: Bresusch-Pagan/ cook-weisberg test of heteroskedasticity

```
. regress var4 var1 var2 var3

      Source |       SS       df       MS              Number of obs =     400
-------------+------------------------------           F(  3,   396) =   29.44
       Model | 1820.35718      3  606.785727           Prob > F      =  0.0000
    Residual | 8161.39282    396  20.6095778           R-squared     =  0.1824
-------------+------------------------------           Adj R-squared =  0.1762
       Total |    9981.75    399  25.0169173           Root MSE      =  4.5398


        var4 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        var1 |   .0740271   .0504779     1.47   0.143    -.0252111    .1732653
        var2 |   .0844216   .0487214     1.73   0.084    -.0113633    .1802065
        var3 |   .3548914   .0510819     6.95   0.000     .2544659     .455317
       _cons |   9.723547   2.515013     3.87   0.000     4.779101    14.66799


. save "C:\Users\Admin\Desktop\regression stata results.dta"
file C:\Users\Admin\Desktop\regression stata results.dta saved

. . hettest breusch-pagan/ cook-weisberg test for heteroskedasticity Ho: constant variance variables: fitted values of rate 96
variable breusch not found
r(111);

. . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
        Ho: Constant variance
        Variables: fitted values of var4

        chi2(1)      =      6.71
        Prob > chi2  =    0.0096

. save "C:\Users\Admin\Desktop\stata results.dta"
file C:\Users\Admin\Desktop\stata results.dta saved

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The normality assumption means that the residuals in the model should be normally distributed. The evidence of normality can be observed in the residuals Histogram and/or P-P plot. There was evidence of normality since the Residuals Histogram was bell-shaped and very few residuals were above or below the normal line (see Figure 3).
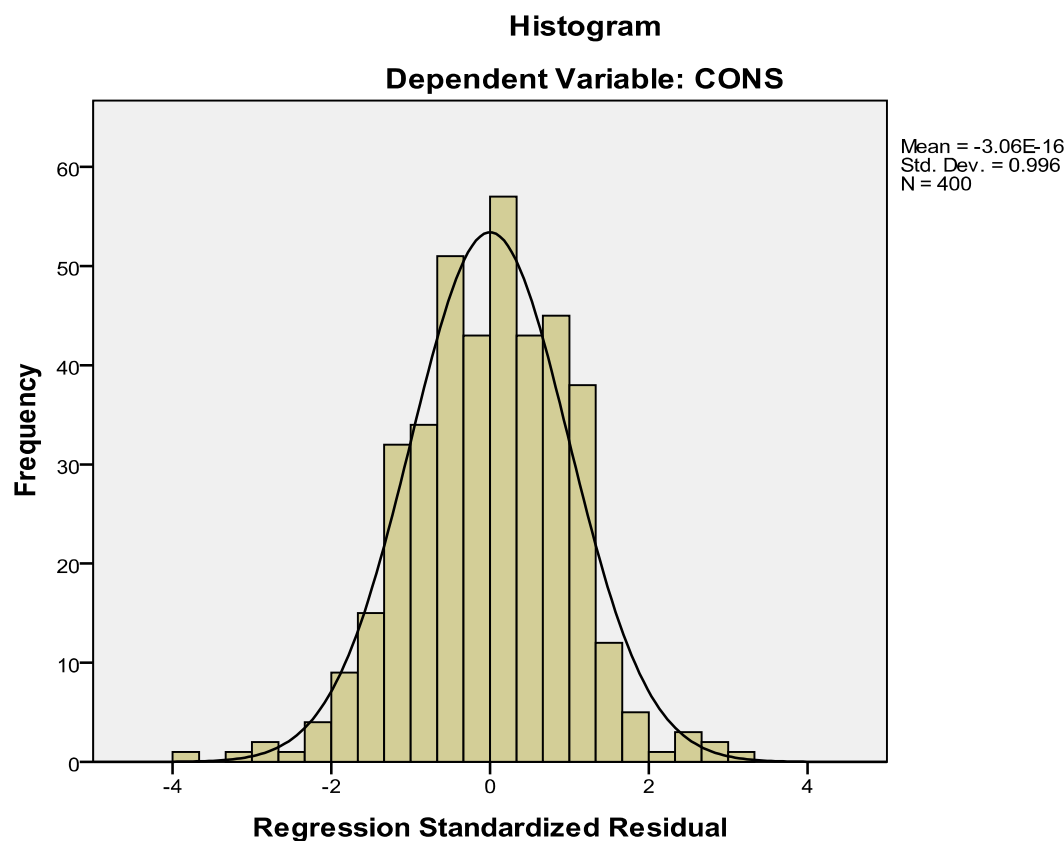
Histogram

Dependent Variable: CONS

Mean = -3.06E-16
Std. Dev. = 0.996
N = 400

Figure 3: Residuals Histogram

Normality was also observed in the P-P plot (see Figure 2) where the plotted points matched the diagonal line. To confirm normality of data, the Shapiro-Wilk test was done. The null hypothesis of the test states, H_o: Distribution is normal. The decision rules is to reject the null hypothesis if p-value of greater than 0.05 and fail to reject the null hypothesis if p-value is less than 0.05. The results (see Table 5) indicated that calculated p-value = 0.67 was greater than 0.05 (95% confidence level). Hence we fail to reject the null hypothesis and confirm that the data comes from a normal distribution.

Table 5: Test of Normality

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CONS	.067	400	.000	.993	400	.067

a. Lilliefors Significance Correction

Conclusion

The model was found suitable for predicting consumerism tendencies among urban household consumers since the combined effect of the independent variables was found significant at 0.05 confidence level. Again, the efficiency of the model was tested and found to have met and satisfied most of the OLS assumptions. The model predicts that 17.6% of variation in consumerism tendencies among urban household consumers is explained by consumer rights awareness, attitudes towards marketing practices and consumer discontent. Consumer rights awareness contributes 6.9%, attitude towards marketing practices 9% while consumer discontent contributes 35.7% towards consumerism tendency among urban household consumers in Nakuru County, Kenya. However, 82.4% of variation in consumerism tendencies among urban household consumers remained unexplained. The low R^2 value may arise due to nature of social studies whereby respondents' attitudes and opinions may affect predictability of the model.

Recommendations

Consumer discontent was found to be the strongest predictor among urban household consumers in Nakuru County. This implies that majority of consumers are dissatisfied with business practices in relation to consumer welfare. The study recommends that government protection agencies such as Kenya Bureau of Standards

(KEBS), Communication Authority of Kenya (CA) and Competition Authority of Kenya (CAK) to enhance their efforts in protecting Kenyan consumers in the marketplace. The study further recommends that consumer education be carried out in order to increase awareness of consumer rights and duties as envisaged in the Consumer Protection Act 2012 and Competition Act 2010.

Since the model is limited in its prediction of consumerism tendencies among consumers in Kenya, an expansion of the scope of the study is highly recommended. An improved model can be achieved by inclusion of more predictors in the model or by a geographical expansion of the study. This will overcome the shortcomings in generalization of findings and/or applicability of the model across other developing countries, categories of consumers and/or Counties in Kenya.

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