

CONSUMER AGE INFLUENCE ON FOOD LABEL READING HABIT

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Abstract:

The objective of this paper was to detect the food label reading habit of consumer according to consumer age. To achieve this goal author of this paper has adopted five variables with independent and dependent status. Four variables were independent like reading complete food label, reading manufacturing date, reading expire date and reading ingredients. One variable was dependent like influence on purchase behavior. The data was collected through questionnaire and 350 questions were distributed among customers. Author has received 251 valid questions. The data was divided into two groups. The two groups were designed with respect to age range. In (Group I) the respondent's age ranges was 20-25 and mean age was 23. Whereas in (Group II) the age was 26-30 and average age was 27. Correlation and regression test were conducted and results has unfolded the fact that there is a difference in both groups for food label reading habits. In Group I three variables significantly influence on purchase behavior of consumer while purchasing food items like reading manufacturing date, reading expire date and reading ingredients. In Group II only two variables like reading ingredients and reading manufacturing date has significant effect on purchase behavior of consumer while purchasing food products. Two variables were common in both groups like reading manufacturing date and reading ingredients. This result has also depicted that consumer normally, irrespective of age group; focus on manufacturing date, which give the freshness of food product, and ingredients to know the nutrients used in processing the food.

Keywords: Age, reading complete food label, influence on purchase decision

JEL Classification: M31, M37

Introduction

Previous research has indicated that packaged item's labeling influenced consumer purchase behavior by Lee et al (2013). The reason behind this notion is that consumer also evaluates food products through label by Bublitz (2010). Traditionally the influencing factors for consumer, in processed food items, are taste, smell and appearance by Wansink (2013). While another research has explored, non-sensory characteristics of a product like nutrients and food processing techniques have also similar effect on consumer behavior by Torjusen (2001). The growing trend of sensory and non-sensory attributes of packaged food has provoked food processors to process not only nutritional food but also design informative labeling by Smith-Spangler (2012).

Lee et al (2013) has indicated that label effect on developing taste of any product. It means that packaged food label contains multiple items like, text, color and image. Each item of the label has different message for consumer or customer. Text provides the processing techniques, nutritional information, price, manufacturing date and expire date etc. Whereas color and image strike the cognition. Shimizu (2013) has conducted a research on organic food acceptance and found that organic food with label has more effect on consumer purchase behavior than without label organic food.

Moreover, food label reading habit enable consumer to take right decision regarding diet by Sharf (2012). The increasing issue, regarding obesity, demands to get aware of consumer about packaged food. Another concept about food label reading habit is that it keeps consumer motivated for purchasing product again and again by Delgado (2011).

According to food drug report of USA (1994), packaged food labeling increased the consumption of processed food. The reason is that food labeling guide consumer to select food according to his/her diet plan. Borra (2006) has noticed that consumer read food label

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when first time he/she purchase any product. Moreover, food label reading habit has discussed and investigated on gender as well. A research has unfolded the fact that female literate consumer are more habitual in reading processed food label as compare to male by Misra (2007). Grunert (2010) has noticed that there were country specific differences in understanding the food label.

The objective of this paper is to analyze the effect of consumer age on food label reading habits. Previous results of researchers have focused on gender and country specific differences in food label reading habits. While some of researchers investigated the food label reading habit with respect to specific food products like organic food items but age, which is one of the part of demographic, yet not been discussed regarding food label reading. The author of this paper has an intention to detect that either food label reading habit become permanent part of consumer behavior with the increase of age or it's just the emotional behavior of consumer which has later ignored due to maturity in consumerism.

Methodology

Cross-sectional data was collected through questionnaire. The questionnaire was divided into six sections like A, B, C, D, E and F. Section A was comprised of demographic questions like age, gender, income and education. Sections B was contained three questions regarding complete food label reading. Section C was consisted of three questions about reading manufacturing date of any food product. Three questions were included in section D regarding reading of expire date. Three questions were involved in section E about reading of ingredients of food products. Section F was enclosed to find the impact of manufacturing date, expire date and ingredients on consumer purchase behavior.

Five variables were used in this paper like complete food label, manufacturing date, expire date, ingredients and purchase behavior. Three variables, food label, manufacturing date and expire date, were taken from Vemula et al (2013). Ingredient was taken from Sharf et al (2011). The purchase behavior was used by author to find the impact of label information on consumer purchases.

The questionnaire was taken from Saha et al (2013) with little modification. The questionnaire was adjusted according to variables used in this paper. The modified questionnaire was distributed among twenty faculty members to check the validity of each question. After small changes in phrases the questionnaire was distributed among 350 consumers. The questionnaire was based on five point Likert scale where (1 for NEVER and 5 for ALWAYS)

To analyze the data statistically author has conducted multiple regression techniques. Author has also run the correlation test to check the relationship of variables.

Hypotheses

- H1: Consumer does read complete food label
- H2: Consumer does read manufacturing date
- H3: Consumer does read expire date
- H4: Consumer does read ingredients
- H5: Food label reading influence on consumer purchase decision

Results

The purpose of this paper was to find the food label reading habits of Pakistani consumers. To achieve this goal author of this paper has distributed 350 questionnaires among consumers and received 251 valid questionnaires. The age range of respondents was (20-30) and qualification range was graduate and undergraduate. Among respondents 40% were existing university students, 20% were pass out graduated but unemployed and 40%

were graduate but job holders. Author of this paper has collected data from both male and female. Out of 251 male respondents were 119 and female were 132. The data was divided into two categories with respect to age like in Group 1 age was 20-25 and in Group 2 age was between 26-30. The reason to divide data in two age groups was to analyze the change behavior of consumer towards food label reading. The average age of group1 was 23 and in group 2 age mean was 27.

To analyze the data author of this thesis has conducted correlation and regression analysis separately. This separate analysis would help author to find the similarities or differences in reading food label as well as influence on food purchase behavior of respondents. Author of this thesis has taken Group 1 data first, for correlation and regression analysis. Table 1 is accounted for that there is a weak but significant relation among all variables except between one pair reading ingredients and reading manufacturing date. The reason behind this correlation result is that in group 1 the age range is 20-25. This is a time when respondents just about to take step out of adolescent age and entering into practical life. Respondent still conscious about food ingredient to know about the calories of food and freshness of food by reading manufacturing date. Table 2 has described the regression results. The regression result has indicated that three variables have positive and significant influence on food purchase behavior of consumers who lie in the age range of 20-25 like reading manufacturing date ($P < 0.02$), reading expire date ($P < 0.000$) and reading ingredients ($P < 0.000$). The adjusted R-square was (0.61). Whereas reading complete food label has negative significant relation with influence of food purchase behavior.

According to these results consumers were not interested to read complete food label while purchasing food products. They were only concern to read manufacturing date, expire date and ingredients. Therefore organizations must focus on these three elements.

Table 1 - Correlation Matrix (Age 20-25)

Construct	Reading Complete Food Label	Reading Manufacturing date	Reading Expire date	Reading Ingredients
Reading Complete food Label	1			
Reading Manufacturing Date	0.32*	1		
Reading Expire Date	0.18*	0.20**	1	
Reading Ingredients	0.26**	0.40*	0.28*	1

Note: * $P < 0.05$; ** $P < 0.001$

Table 2 - Results of Regression Coefficients (Age 20-25)

	Influence on food purchase behavior	
	B	P
Reading Complete Food Label	-0.013	0.05**
Reading Manufacturing Date	0.144	0.024***
Reading Expire Date	0.311	0.000***
Reading Ingredients	0.364	0.000***
Adjusted R-Square	0.61	

*** $P < 0.01$

Author this thesis has conducted separate correlation and regression analysis for Group 2. According to Table 3 there was strong and significant correlation among almost all variables except one pair reading ingredients and reading complete food label. There was noticeable difference between the results of Table 1 and Table 3. It indicated that gradual increase in consumer age made consumer experience in shopping products. In package food items consumer not only consider ingredients but manufacturing dates and expire dates also become significant.

Table 3 - Correlation Matrix (Age 26-30)

Construct	Reading			
	Reading Complete Food Label	Manufacturing date	Reading Expire date	Reading Ingredients
Reading Complete food Label	1			
Reading Manufacturing Date	0.46***	1		
Reading Expire Date	0.42***	0.60***	1	
Reading Ingredients	0.28*	0.32*	0.68***	1

Note: *P < 0.05; **P< 0.01;***P<0.000

Table 4 - Results of Regression Coefficients (Age 26-30)

	Influence on food purchase behavior	
	B	P
Reading Complete Food Label	0.074	0.632
Reading Manufacturing Date	0.674	0.001***
Reading Expire Date	-0.568	0.015**
Reading Ingredients	0.318	0.097**
Adjusted R-Square	0.53	

P< 0.01; *P<0.001

Table 4 accounted for that only two independent variables, like reading manufacturing date and reading ingredients, were significant for consumer who lies in the age group of 26-30. Whereas one independent variable, reading expire date, was negative and significant for consumer while purchasing package food items. The variable reading complete food label was insignificant while purchasing food items. The adjusted R-square was (0.53). The results of table 2 and table 4 were different which indicates that priorities in purchasing food items change with the growth of age.

As far as the hypothesis of this paper was concern, the results depicted that for Group 1 author has rejected H1 and accept H2, H3 and H4. Whereas for Group 2 author has rejected H1 and H3 while accept H2 and H4. As far as H5 was concern both groups have accepted. It means the behavior of both age groups respondents were different in market.

Conclusion

Author of this paper wants to investigate influence of age on reading package food label. To achieve this goal author has distributed 350 questionnaires and received 251 valid questionnaires. The questionnaire was distributed between both genders. The age range of respondent was 20-30. After receiving data author has sought out data into two groups with respect to age. In group 1 the age range was 20-25 and in group 2 age was 26-30.

Author has conducted correlation and regression tests, separately and compares the results of both groups. These results indicate that there is significant difference in reading food labels as well as in food purchase behavior of both age groups. Author has adopted four variables like reading complete food label, reading manufacturing date, reading expire date and reading ingredients. The respondents who belong to age group 20-25 prefer to read manufacturing date, expire date and reading ingredients. While consumers who belong to age range 26-30, they read only manufacturing date and ingredients. It means that in early age, when consumers are initially interacting with market, their involvement and observation for purchasing of food products are high. When consumer crosses the age of 25 and gains more shopping experience, his/her food label reading habits change.

There were five hypotheses in this paper. For Group 1 four out of five hypotheses are accepted like H2, H3, H4 and H5 for Group 2 three hypotheses are accepted H2, H4 and H5.

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