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## **AN ANALYSIS OF CONSUMER VALUES, NEEDS AND BEHAVIOR FOR LIQUID MILK IN HAZARA, PAKISTAN**

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### **ABSTRACT**

This study examines the relationship of consumer values, needs and behavior in order to efficiently and effectively position and target the market. The purpose is to identify those motivational factors and variables that influence the consumer to make the purchase decision and types of personal values, motives, emotions and moods directing them. The empirical research is based on a survey with a sample of consumers from Hazara Division using questionnaire and interviews. The findings indicate that personal and interpersonal values are found to be the main motivators behind the purchase of milk products. Among the three types of needs identified to be satisfied through milk products, in order of importance, are health, taste consciousness and environmental needs.

### **KEY WORDS**

marketing, consumer values, behavior, and LOV scale.

### **1. INTRODUCTION**

In recent years, many food companies have processed and marketed different food items in response to increasing consumer concern and interest. For the prediction of future consumer behavior regarding food, researchers consider the factor like diet, health and the role of individual characteristics. There are two major forces that shape what one buy: personal motives, thoughts, feelings, attitudes, patterns of behavior; families, cultural background, and the media advertisement. Consumers always try to buy those products that will help them to achieve desired goals and values, and they consider product attributes as a means to an end. This research seeks to propose that the utilization of consumer values, needs and consumer behavior helps to position the product more efficiently and effectively. The purpose is to identify those motivational factors and variables that influence the consumer to make the purchase. Therefore, the first aim of the study is to understand which motives and consumer values determine the consumer's needs towards food, which in turn influence the subsequent purchase intentions and behavior.

To better understand consumer purchase decisions, an analysis among perceived product attributes such as quality, taste and environmental concerns is undertaken. As stated by Mowen & Minor (1997) all these values are present within every individual, in a given product context. One or more of these values become dominant and influence the consumer most and to satisfy these leading values, people engage in value-directed behavior.

## **2. THEORETICAL ASPECTS OF THE CONSUMER BEHAVIOR**

Food choice is a complex phenomenon, dependent on many factors, which affect human behavior differently, resulting in the selection of some and the rejection of other products (BabicZ-Zielin´ska, 2001; Lindbladh et al., 1996). There are many models describing food choice factors and their relations with each other and arrange those factors into groups (Furst et al., 1996; Gains, 1994; Keane & Willets, 1994; Shepherd, 1989; Story et al., 2002). The above-mentioned researchers approve the Shepherd approach (1989), which divides food choice factors into three main groups:

1. Product related factors consist of physical and chemical composition, sensory characteristic (taste, aroma, texture, and visual appearance), functional aspects (packaging, accessibility, and convenience), nutrient content, etc.,
2. Consumer related factors include personality (age, gender, and education level), psychological factors (values, personality, experience, and mood), physiological effects (satiety, hunger, and appetite), etc.,
3. Environment-related factors include economic (price, incomes), cultural (beliefs, customs and norms), and social factors (fashion, society and safety), etc.,

Many researchers have studied the impact of cultural factors and they tried to measure the values of the individual. The literature review reveals following values measurement tools:

1. The Rokeach value system (RVS) (Rokeach, 1973);
2. The values and lifestyles system (VALS) (Mitchell, 1983);
3. The List Of Values (LOV) (Kahle, 1983); and
4. The Schwartz's human's values (1992).

Among these measures the List Of Values (LOV) is commonly used in research on values because of its ease of management and high reliability. It is considered to be well-organized, assessable sets of variables that are less various, more centrally seized and more closely associated to stimulus than demographic and psychographics measures. The LOV has also proven its effectiveness in cross-cultural applications (Beatty, Kahle, & Homer, 1991; Goldsmith, Freiden, & Kilsheimer, 1993). Commonly used method of value measurement was developed by researchers at the University of Michigan (Veroff et al, 1981; Kahle, 1983). According to Beatty et al (1985), the instrument called the LOV was developed from a theoretical base proposed by Feather (1984), Maslow (1954) hierarchy of needs, Rokeach (1973) terminal values, and other generation in value research. The LOV typology is related to social distinction theory (Wedel et al., 1998). The nine LOV items were derived by collecting the values from the above sources of values: Security; Sense of belonging; Being well respected; Fun and enjoyment in life; Warm relationships with others; Self-respect; Self-fulfillment; Sense of accomplishment; and Excitement. The first three values are related to a person's link with the rest of the society; the next two values represent an internal/ apersonal value factor; and the remaining four values related to an internal/personal value factor. This categorization of values is found to strictly follow (Homer & Kahle 1988: and Chryssohoidis & Krystallis 2005)

A significant number of researchers recommended that values influence a variety of characteristics of consumption and behaviors (Vinson et al., 1977; Becker and Connor, 1981; Prakash and Munson, 1985; Valencia, 1989; Donthu and Cherian, 1994; Wedel et al., 1998, Shim and Eastlick, 1998; Kamakura & Novak, 1992; Kim et al, 2002; Chryssohoidis & Krystallis, 2005). Whereas Kahle (1980) argued that values have an indirect effect on consumer behavior through less abstract mediating factors such as domain specific attitudes and needs. Therefore all the individuals have some stated goals and ends towards which they strives and the selection and maintenance of these goals and ends is the responsibility

of the values as well as regulating the processes in which struggle has been take place (Vinson, Scott, & Lamont, 1977; Kims et al, 2002). Therefore values, explicit or implicit, function as grounds for behavioral decisions in general and consumption behaviors in particular (e.g., Carman, 1977; Williams, 1979; Allen, 2001). The Values help people adjust the situation for the achievements of their goals by directing both their effort and resources. Other researchers have also attempted to understand consumer behavior through needs (cf. Tse et al., 1989; Homer and Kahle, 1988; Kim et al, 2002; Hollywood et al., 2007). These researchers conclude that individual needs and behavior toward food are strongly and positively correlated and consumer values and needs remain an important predictor of consumer behavior.

Meeting consumers' needs is the fundamental goal of marketers. Consumer products are generally marketed to appeal to three basic types of consumers' needs. Previous segmentation studies identified the three categories of consumer needs: are Functional needs (e.g. quality seeker); Social needs (social directed\environmental directed); and Experiential needs (taste, pleasure\gratification). (Park et al. 1986; & Kim et al, 2002; Chryssohidis & Krystallis, 2005)

The market for milk products all over the world experienced rapid growth during the late 1980s, part to an increase in public interest for safe and healthy food and to a series of widely shown food scares. The general increase in the knowledge and awareness of health issues over this period also contributed to the growth of the market. The most important attributes of organic foods like milk are health, environment and high quality taste (Pearson, 2002). That determines the choice of dairy products by consumers. However the barriers to purchase are price and availability of the product (Lockie et al., 2002; McEachern & McClean, 2002). The increasing importance of health and the impact of food production on the environment in food consumption trends indicate that consumers today require not only healthy but also environmentally sustainable food products (e.g., Baker & Crosbie, 1993; Grunert & Juhl, 1995; Wandel & Bugge, 1997; Rozin et al, 1999; Magnusson et al., 2001; Torjusen et al., 2001).

### **3. MILK PRODUCTS MARKET IN PAKISTAN**

Pakistan is the world's seventh most populous country, with 162.6 (2007) million people. It is growing at a rate of 2.16 per cent per annum. A wide variety of consumer goods are simply not available to the average citizen. However, Pakistan has undergone considerable social and economic change in recent years. A strong consumer market is now developing, where more consumers are in a position to purchase a wide variety of consumer goods. The cultural and socio-economic conditions in Pakistan are expected to shape the types of needs to be met through different products and services.

Consumer behavior has been significantly influenced by the socioeconomic conditions of markets (Inkeles, 1983; Tse et al., 1989). Consumers' per capita income and disposable income have been good indicators of the amount of resources that consumers assign to purchase consumer goods (Johansson & Moinpour, 1997). Given Pakistan's consumers have relatively limited economic resources and limited exposure to western culture, they have less opportunity to learn about symbolic aspects of consumption. It is estimated that the needs to be met through different products will differ among Pakistani consumers.

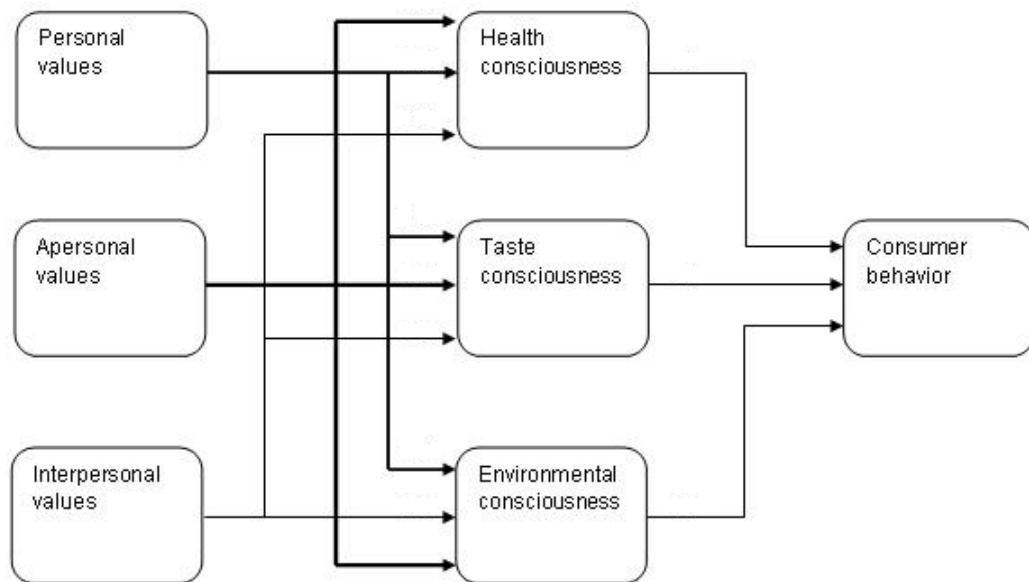
The GDP growth in Pakistan has been estimated at 2 per cent for the year 2009 as against the original 5.5 per cent target, a marginal increase of 0.3 per cent. Whereas per capita income is \$1,042. The agriculture sector is growing at the rate of 4.7 percent and the livestock, with almost 50 percent contribution to agriculture, is growing at the rate of 3.7 per cent (Government of Pakistan 2008-09). The livestock sector contributes 49 percent of the value addition in the agriculture sector, and about 11.4 percent to GDP, which is higher than the contribution made by the entire crops sector (10.9 percent) of the country. Net foreign exchange earnings from livestock were to the tune of Rs.53 billion in 2000-01, which is about 12 percent of the export earning for that year. The livestock sector output grew by 3 per cent until 1980 and over 5 per cent thereafter (Government of Pakistan 2002). Pakistan is at sixth number in the milk

production and has a great potential in the live stock sector. There is a need to convert this potential into the strength and comparative advantage of the Pakistan. For this purpose Government and other private institutions plan to conduct research and development to capture and exploit this opportunity not only to meet the local needs but also for earning foreign exchange. There is a need to find out the market trends, needs, demand and motivational factors for successful commercializing of milk and other live stock products. In this context the objectives of this study are to examine the relationship between consumer values and the types of needs to be met through milk products; and to examine the relationships between the types of needs to be met through milk product and consumer behavior.

#### 4. CONCEPTUAL FRAMEWORK

The conceptual framework (based on Kim et al, 2002) shows a hierarchical relationship between the consumer's values, needs and behavior. The consumer's values work as an independent variable influencing the dependent variable consumer needs and each type of need is dependent upon the combination of three types of consumer's values. Similarly the needs work as independent variable and consumer behavior dependent upon the combination of three types of the needs. Thus consumer's values influence the needs, which in turn influence the consumer behavior to be met through milk product.

**FIGURE 1: CONCEPTUAL FRAMEWORK**



#### 5. METHODOLOGY

The Hazara division has been selected as the universe of study for the milk product. The decision to choose this product is based on the fact that Pakistan is the sixth largest producer of milk in the world and it is a basic necessity for human beings. Hundred respondents were interviewed using semi structured interview schedule to collect data. The questionnaire was developed in order to cover the information regarding which consumer values and needs influenced the consumers most and direct them towards the purchase of a product. All questions including the LOV items were measured on the 5-point agreement Likert type scale. it includes questions relating to health consciousness; taste consciousness;

environmental consciousness and consumer buying behavior. The nine questions addressing the importance of the nine LOV items were also included in the questionnaire.

## RESULTS AND DISCUSSIONS

### 6. CONSUMERS VALUES MEASURED BY LOV ITEMS

The consumer values as measure by the Kahle’s individual LOV items are summarized in the Table 1. An examination of the means of the individual values shows that all the items of LOV are important for the consumers in their lives. The values are listed on the priority basis.

**TABLE 1: MEANS AND STANDARD DEVIATION OF THE NINE LOV ITEMS**

	N	Mean	Std. Deviation
Accomplishment	100	4.54	0.501
Excitement	100	4.53	0.688
Self fulfillment	100	4.43	0.714
Security	100	4.43	0.639
Self respect	100	4.29	0.671
Belongingness	100	4.17	0.725
Warm relationships	100	4.17	0.804
Well respected	100	4.09	1.006
Fun& enjoyment	100	4.2	0.696
Valid N (list wise)	100		

Source: survey 2008

Among all of the values “sense of accomplishment” has the highest mean value which indicates that respondents marked this value as most important and they have the desire to have quality food products and wish to be healthy and successful in all the fields of life (Maslow’s hierarchy of human needs 1954). The “excitement” value was the second most important value for respondents, which indicates that the consumers want to enjoy their food. Similarly the values of “security” and “self fulfillment” were the third important values.

The LOV ratings is generally consistent with the ratings found in the previous studies on social values and fashion leadership (Goldsmith et al, 1991, 1993); the value-attitude-behavior hierarchy (Homer & Kahle, 1988); cross cultural consumer values, need and purchase behavior (Kim et al, 2002); organic consumer’s personal value research (Chryssohidis & Krystallis, 2005); and motivational consumer behavior (Geeroms 2007). Vermier & Verbeke (2007) has exactly the same hierarchy of the values with achievement (sense of accomplishment) at the top then stimulation (excitement) and hedonism (fun & enjoyment) and conformism (belonging) at third with the ratings as (4.21, 4.20, 4.13).

**TABLE 2: MEANS AND STANDARD DEVIATION OF LOV GROUPS**

	N	Mean	Std. Deviation
Personal	100	4.4475	0.0968
Interpersonal	100	4.2300	0.1915
Apersonal	100	4.2	0.0766
Valid N (list wise)	100		

Source: survey 2008

As shown in the Table 2 the value factors are also listed on the priority basis, which show that the personal values were the most important values as compare to the others. The higher rating of the personal values suggests that people of Hazara Division rate the health consciousness (functional needs) as their first priority. The apersonal and interpersonal values are also important as (Kim et al, 2002). The findings are strongly identical to Chrysohoidis & Krystallis (2005) values as (4.60, 4.17 and 3.84 respectively).

**TABLE 3: MEANS AND STANDARD DEVIATION OF THE CONSUMER NEEDS**

	N	Mean	Std. Deviation
Health	100	3.66	0.1706
Taste	100	3.6	0.1953
Environment	100	3.2150	0.1279
Valid N (list wise)	100		

Source: survey 2008

The respondents rated health consciousness highest representing it as lowest level need in the hierarchy that must be fulfilled through food (milk) before any other need. Consumers ranked taste consciousness second highest after health, and environmental consciousness at third level. Although there is no significant difference between health consciousness and taste consciousness values. The results of the relative ranking of the three needs within the consumer market indirectly demonstrate the influence of cultural and economic market conditions on shaping consumer needs by prioritizing the importance of needs to be met through milk product (Kim et al, 2002; Chrysohoidis & Krystallis, 2005).

## 7. INTERNAL CONSISTENCY CHECK

The collected data has been verified for its reliability by calculating Internal consistency in a number of ways. The most commonly used statistic is Cronbach's coefficient alpha. Nunnally (1978) recommends a minimum level of reliability as 0.7. The values are dependent on the number of items in the scale. When there are a small number of items in the scale (fewer than ten), Cronbach alpha values can be quite small.

Table 4 shows that overall; Cronbach's Alpha ranges from (0.457 to 0.846). The alpha value for the Environmental consciousness (0.846) is the strongest, health consciousness (0.705) and consumer

behavior (0.705) has the second strongest value and taste consciousness (0.568) is at third level. Personal value has the cronbach alpha (0.593). It should be noted that the reliability of Apersonal values (0.457) is relatively weakest because it has very small number of the items. As Kims et al, (2002) has the self directed values (0.79) and experiential needs (0.631).

**TABLE 4: RELIABILITY STATISTICS**

Variable	Cronbach's Alpha	N of Items
Health consciousness	0.705	10
Taste consciousness	0.568	7
Environmental consciousness	0.846	10
Personal values	0.593	4
Apersonal values	0.457	2
Interpersonal values	0.511	3
Consumer behavior	0.705	12

Source: survey 2008

**TABLE 5: RELIABILITY STATISTICS**

Cronbach's Alpha	N of Items
0.790	7

Source: survey 2008

The Cronbach's alpha coefficient is 0.790 as shown in the Table 5. It exceeds the recommended value of 0.7 (Nunnally, 1978; Lee, 2007), demonstrating sufficient internal consistency in the scale applied to the research model.

## **8. RELATIONSHIP BETWEEN CONSUMER'S VALUES, NEEDS AND BEHAVIOR**

This section represents results related to correlation between the consumers' values, needs and consumer behavior.

### **8.1 CONSUMER'S VALUES AND HEALTH CONSCIOUSNESS**

As shown in table 4 the result of the correlation between the personal values and health consciousness indicates that there is a positive correlation ( $r=0.650$ ,  $n=100$ ,  $p<0.01$ ), strongest among the three values. Similarly the correlation between the health and apersonal values is ( $r=0.334$ ,  $n=100$ ,  $p<0.01$ ) and the interpersonal values and health consciousness is ( $r=0.296$ ,  $n=100$ ,  $p<0.01$ ) indicating strong positive correlation.

**TABLE 6: CORRELATION CO-EFFICIENT ANALYSIS**

<b>Correlations</b>			
<b>Needs</b> Values	<b>Health</b> consciousness	<b>Taste consciousness</b>	<b>Environment</b> consciousness
Personal value	.650 **	.552 **	.416 **
Apersonal values	.334 **	.260 **	-.388 **
Interpersonal values	.296 **	.461 **	.491 **
Consumer behavior	.595 **	.575 **	.517 **

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: survey 2008

### **8.2 CONSUMER'S VALUES AND TASTE CONSCIOUSNESS**

The strongest connection is between the taste and personal values ( $r=0.552$ ,  $n=100$ ,  $p<0.01$ ) and this is significant at the significant level 0.01 using the two-tailed test. Similarly the correlation between the taste and interpersonal values is as ( $r=0.461$ ,  $n=100$ ,  $p<0.01$ ) and the taste and apersonal values ( $r=0.260$ ,  $n=100$ ,  $p<0.01$ ) which shows that the consumer wants to enjoy their food and are taste consciousness.

### **8.3 CONSUMER'S VALUES AND ENVIRONMENTAL CONSCIOUSNESS**

The strongest correlation has been found between the environmental consciousness and interpersonal values ( $r=0.491$ ,  $n=100$ ,  $p<0.01$ ). Followed by environmental consciousness and personal values ( $r=0.416$ ,  $n=100$ ,  $p<0.01$ ) and the environmental consciousness and apersonal values ( $r= -0.388$ ,  $n=100$ ,  $p<0.01$ ). This suggests that the consumers rated personal values very important expect that milk product to fulfill their social needs and should be environmentally sustainable. They prefer to consume milk mostly for satisfaction and fulfillment of their health and taste needs, based on knowledge and awareness for the selection of the best product available in the market. The result of environment consciousness and apersonal values indicates that consumers show no concern about the information regarding the product they purchase. They are habitual consumers. All of these values have a psychological impact on the consumer behavior to purchase and consume healthy food such as quality milk product.

### **8.4 CORRELATION ANALYSIS OF CONSUMER NEEDS AND CONSUMER BEHAVIOR**

The results shows that the strongest relationship is exist between the health consciousness and consumer behavior ( $r= 0.595$ ,  $n=100$ ,  $p<0.01$ ), which indicates that the consumers are health conscious. More the influence of health consciousness need on the consumer behavior more will be the consumers motivated towards the purchase of quality product.

The correlation between the taste and consumer behavior ( $r=0.575$ ,  $n=100$ ,  $p<0.01$ ) indicates that the consumers want to enjoy good and tasty food. Thus the consumers who are taste conscious they will prefer to buy the food product according to their taste in order to meet their stated need. The result of the correlation between the consumer behavior and environment consciousness indicates a strong positive correlation ( $r=0.517$ ,  $n=100$ ,  $p<0.01$ ). Consumers have a healthy dietary lifestyle and are environmental conscious and prefer to buy the product not only safe for their health but also to their environment in order to meet their needs. Therefore higher is the awareness regarding the environment higher will be the health consciousness of consumers and vice verse.



## 9. HIERARCHICAL RELATIONSHIP BETWEEN CONSUMER'S VALUES, NEEDS AND BEHAVIOR

Multiple regression analysis was employed to examine the impact of consumer values on each need and that of needs on consumer behavior.

**TABLE 7: MULTIPLE REGRESSION OF CONSUMER VALUE, NEEDS AND BEHAVIOR**

Regressions Coefficients				
	Relationships of consumer values and needs			
Dependent variables	Independent variables			Model summary R <sup>2</sup>
	Personal values	Apersonal values	Interpersonal values	
Health consciousness	0.716	0.394	0.263	0.545
Taste consciousness	0.707	0.423	0.580	0.511
Environmental consciousness	0.683	-0.735	0.602	0.51
	Relationships of consumer needs and behavior			
	Health consciousness	Taste consciousness	Environmental consciousness	
Consumer behavior	0.435	0.286	0.255	0.508

Note: - p<0.05

Source: survey 2008

### 9.1 CONSUMER VALUES AND HEALTH CONSCIOUSNESS

The regression co-efficients for the predictor variables (personal values, apersonal values, interpersonal values) are shown as in table 5. The personal, apersonal and interpersonal values play important role in explaining and predicting the health consciousness of the consumers.

The estimated regression equation is  

$$P = 43.633 + 0.716 (PV) + 0.394 (APV) + 0.263 (IPV).$$

The co-efficient of determination is 0.545 showing ratio of explained variation to total variation. The self-directed values of Kim et al, (2002) survey has the value 0.197 and 0.030 for the social affiliation variable, which is less then the interpersonal value rating.

### 9.2 CONSUMER VALUES AND TASTE CONSCIOUSNESS (EXPERIENTIAL NEEDS)

The positive relationship between the consumer values and the taste consciousness is depicted by the positive value of unstandardized coefficient. The values of the unstandardized coefficient for predictor variables (personal, apersonal and interpersonal values) are 0.707, 0.423, and 0.580 respectively.

The personal value has higher value than the Kim et al, (2002) self-directed variables 0.152 value, whereas 0.070 value for social affiliation variable.

The estimated regression equation is

$$P = 72.941 + 0.707 (PV) + 0.423 (APV) + 0.580 (IPV).$$

The co-efficient of determination is 0.511.

### **9.3 CONSUMER VALUES AND ENVIRONMENTAL CONSCIOUSNESS (SOCIAL NEEDS)**

The R squared value 51% shows that variation in the dependant variable environmental consciousness. From the output, the unstandardized coefficient for personal values, apersonal values and interpersonal values are 0.683, -0.735, and 0.602 respectively. The Kim et al, (2002) survey shows the significant values as (0.086, 0.023) respectively.

The table shows a negative relationship between the apersonal values and environmental consciousness. This negative relationship is depicted by the negative value of unstandardized coefficient -0.735. Keeping all the other variables constant, decrease of -0.735 is expected in the environmental consciousness due to a unit increase in the apersonal values.

The estimated regression equation is

$$P = 17.650 + 0.683 (PV) - 0.735 (AP) + 0.602 (IP).$$

From the above discussion it has been concluded that the people of Hazara division rated highest the personal values. They consider the interpersonal values at second highest. This result supports the findings of the earlier studies by Homer & Kahle (1988), Geeroms (2007) and Kim et al, (2002). In their studies, self-directed, self-actualization or internal consumer values were more closely related to favorable nutrient attitudes toward natural food than were self-actualization values Homer & Kahle (1988), Chryssohoidis and Krystallis (2005) and Kim et al, (2002). In contrast, Shim and Eastlick (1998) found that social affiliation values were more strongly related to favorable attitudes toward shopping malls than were self-actualization values. This suggests that consumers consume different products or services to fulfill different values (e.g. self-actualization vs socialization values) in their daily life. Kim et al, (2002).

### **9.4 RELATIONSHIP BETWEEN THE CONSUMER NEEDS AND CONSUMER BEHAVIOR**

The final part of the Regression output gives the Regression Co-efficients for consumer needs and consumer behavior. The co-efficient of determination is 0.508 or approximately 51% of variability of behavior is accounted for by the variations in this model. The regression co-efficients for the predictor variables (health consciousness, taste consciousness, environmental consciousness) are shown as 0.435, 0.286, and 0.255. The Regression Co-efficients for functional need of the Kim et al, (2002) was 0.225 almost same to the present survey value. For the experiential needs and social needs the Kim et al, (2002) has the value 0.147, 0.216 that shows the same scenario. This results in the acceptance of hypothesis H5 and H6, which states that the taste and environmental consciousness are positively related to the consumer behavior.

It has been found that consumer's health consciousness (functional needs) had a strongest positive impact on consumer behavior. Those consumers higher in health consciousness needs tended to purchase and consume quality milk products. The taste consciousness needs rated at second strong motivator which show the consumers needs for the enjoyment and fun. This result supports the findings of the earlier studies by Homer & Kahle (1988); Chryssohoidis and Krystallis (2005) and Kim et al, (2002).

The y intercept of the regression is  $-4.750$ . The model showing the relationship between the consumers needs variable and consumer behavior has the following form:

$$P = -4.750 + 0.435 (H) + 0.286 (T) + 0.255 (E).$$

## 10. CONCLUSIONS

Based on finding of this study, it can be concluded that the values-needs-behavior hierarchy model can be applied to a specific purchase and consumption behavior (i.e., natural food stores). As proved earlier by many authors these findings can also be applied to a broad purchase behavior (i.e., regional shopping malls) that extent a wide range of product and service classes as well as different retailer and service systems. However, it should be noted that the extrapolative power of needs for behavior was similar in this study as it was in Homer and Kahle's (1988); Shim and Eastlick (1998); Kim et al, (2002); Chryssohidis & Krystallis (2005); Geeroms (2005); Vermier and Verbeke (2007) studies. This indicates that, there are a number of additional factors that influence food shopping and consumption behaviors and one might consider that natural food consumers are much more likely to be devoted to their shopping experience than are shoppers of regional malls. However, the underlying flow of consumer values-needs-behavior in the food shopping signifies that by developing tenant and promotional mix strategies designed at appealing to consumer values, product attribute can positively influence consumer behavior. Past studies (i.e., Kahle and Kenney, 1989) indicated that for the benefit of value fulfillment people often purchase products and services. Our study also indicates that people may select food shopping for the same reason, i.e., the benefit of fulfilling personal and interpersonal values.

Our findings demonstrates that personal values are most significantly related to types of needs to be satisfied through milk products (Kim et al, 2002; Chryssohidis & Krystallis, 2005; Geeroms, 2007; Vermier & Verbeke (2007). The personal values (internal values) lead the consumers to the health consciousness need to be satisfied through milk product along with their taste consciousness. The role of values in determination of type of consumer needs to be satisfied by milk products was supported by the strong positive regression coefficients and correlation of personal values and health, taste and environmental consciousness needs of consumers and they try to realize their personal values by fulfilling their health consciousness needs of milk products.

According to the analysis the health consciousness (functional needs) was rated highest by the respondents as compare to the other two needs. The people who are more health conscious spend more money and willing to pay more for the hygienic and quality milk product. They are more interested to gather the information about their product. They are the people who have children and senior family members. They rated taste consciousness at second highest revealed that they purchased more flavored milk, for the purpose of gratification and enjoying the product. Taste consciousness needs are a stronger, more generally common motivator for food purchases than are social needs among the consumers (Homer & Kahle 1988; Kim et al, 2002; Chryssohidis & Krystallis, 2005). Consumers' milk purchase behavior seems to be attributed to the fact that their preferences regarding the products are fulfilled more of their health and taste consciousness needs than their environment needs.

This result suggests that consumer trying to satisfy particular type of needs through personal values as expressed in milk purchases. Different values might be achieved through consumption of different products or services. Consumers' general purchase behavior reflects how consumers generally utilize and prioritize their needs to be satisfied from brand loyal behavior (usually buy the same brands of milk), this reflects the behavior of consumers who wanted to fulfill all three types of needs through milk purchase decisions (Kim et al, 2002).

## 11. RECOMMENDATIONS

As most buyers are aware of environmental issues and processing of milk product, and have an accurate knowledge, it is appropriate to focus promotion on the positive attributes of milk product, along with making buyers aware of it. Further, the most important attributes of these products are health, quality,

taste and environment. The inclusion of these attributes, such as a brand emphasizing the health, quality and environment claims, will help and assist buyers by making it easy for them to identify the presence of these hidden attributes at the time of purchase. Thus, the brand simplifies the choice task by allowing consideration of revealed attributes only.

Future studies can be conducted across consumers in different socio-economic backgrounds within the same country (or huge metropolitan cities) markets. On the basis of different types of needs consistent with their values, Consumers may be segmented into sub-markets. Therefore, in each country's market to develop effective needs-based marketing strategies, it is necessary to understand consumers' causal values and needs. To develop specific needs-based marketing strategies more detailed information for marketers can be provided by this approach. The consumer values and needs may be used to characterize national consumer markets to develop successful marketing strategies that appeal to the needs of consumers.

The sample is regional in nature. Such studies should be conducted at the national or international level, where it is appropriate, that can be broader inclusive in terms of both the income level and age of the people. The earnings, professional position, family consumption and life cycle stage were eliminated and avoid to test in this model because of some barriers. These variables surely can be tested with a broader sample.

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