

**A Comparative Study on Buying Behaviour of Rural and Urban Consumer on  
Mobile Phone in Jamnagar District**

*Chirag V. Erda\**

*I know not how I may seem to others, but to myself I am but a small child wandering upon the vast shores of knowledge, every now and then finding a small bright pebble to content myself with.*

*-Plato*

**Introduction and Importance of Study**

The Indian rural market with its vast size and demand base, offer a huge opportunity that companies can't afford to ignore. To expand the market share more and more companies are foraying into India's rural markets. Among those that have made some headway are HLL, Coca-cola, Britannia, LG, Philips and Colgate Palmolive to name a few. (Balaji Sathya Narayanan, 2007).

There is no official definition of what constitutes a rural area. However, an urban area is defined as per the Census of India as "all places with a municipality, corporation, cantonment or a notified town area." And "all other places satisfying the following criteria:

- a) Minimum population of 5000.
- b) At least 75 percent of male working population in non-agricultural pursuit.
- c) Density of population of at least 400 persons per square kilometer."

Therefore, an area that does not satisfy the criteria specified above can be considered a rural area. For our purpose, we define rural marketing as any marketing activity in which one dominant participant is from a rural area.

For the purpose of defining the domain of rural marketing, "rural" and "urban" can be visualized on a continuum, consisting of three broad groups, namely, rural, rurban and urban. The construct called *rurban* is the overlap between rural and urban, with physical features closer to urban areas and proximity to large urban centers, but with deep rural sociological moorings. The domain of rural marketing, thus can be seen in a two dimensional space as a flow of goods, services, and ideas from one area to another, except in the case of urban to urban flow.

A complex set of factors influence rural consumer's behavior. Social norms, traditions, caste, and social customs have greater influence on the consumer behavior in rural areas than in urban areas. The seasonality of agricultural production influences the seasonality of rural consumer's demand. Given the fact that the landless laborers and daily-wage earners get their income in installments, their purchasing is restricted to small quantities of products at a time, mostly on a daily basis or once in tow or three days. (Jha Mithileshwar, 2007)

A farmer in rural Punjab is more progressive than his counterpart in Bihar, a farmer in Karnataka is far more educated than one in Rajasthan, and so on and so forth. In an urban family, the husband, the wife and often even the children are involved in the buying process. But in a village, because of the lack of mobility among women and their having very little contact with the

market, it is the men who make the purchase decisions. Further, while an urban individual is free to take independent purchase decisions, in a village, because of the strong social levels community decision making is quite common. Companies that took the trouble to understand these needs and peculiarities have tested success. (Kashyap Pradeep, 2005).

The present study aims to examine the comparative buying behavior of rural and urban counterparts towards the purchase of mobile phone. A comparative study is needed to assess the similarities and differences between buying behavior displayed by both urban and rural consumers with regards to mobile phone. Further, it will guide various mobile manufacturing companies about modification required in present marketing strategies applied for tapping urban markets and to decide, if possible, and to what extent these strategies can be molded and applied successfully to the rural markets. To achieve these objectives an attempt is made to compare and analyze the factors (Price, Quality, Style, Functions and Brand) which act as motivators both for rural and urban people in purchase of mobile phone.

### **Research Objectives:**

Marketers are today making a beeling towards rural India. The 740 million potential consumers and 6,30,000 villages is rural India make up for 41 percent of India's middle – class and 58 percent of the country's total disposable income. Little wonder then that almost all of corporate India is falling head over heels to reach out to rural India, which can add substantially to their bottom lines.

This paper is an attempt to explore the motivational factors for mobile purchase in view of the emergence of vast opportunities for rural markets. The present study aims to examine the comparative buying behavior of rural and their urban counterparts towards the purchase of mobile phone. A comparative study is needed to assess the similarities and differences between buying behavior displayed by both urban and rural consumers with regards to mobile phone.

### **Hypotheses Development Based On Literature Survey:**

The study attempts to compare and analyze the motivational factors for purchase of mobile phone among rural and urban consumers. The motivational factors selected for purchase of mobile phone are: Price, Quality, Style, Functions and Brand. Following Hypothesis are tested:

1. H1: There is no significant difference between rural and urban consumers regarding mobile phone on 'Price Consciousness'.
2. H2: There is no significant difference between rural and urban consumers regarding mobile phone on 'Quality Consciousness'.
3. H3: There is no significant difference between rural and urban consumers regarding mobile phone on 'Style Consciousness'.
4. H4: There is no significant difference between rural and urban consumers regarding mobile phone on 'Functions Consciousness'.
5. H5: There is no significant difference between rural and urban consumers regarding mobile phone on 'Brand Consciousness'.

### **Sub – Objectives:**

1. To examine the Source of Information considered.
2. To examine the Role of Family Members in influencing brand choice.
3. To examine Consumer Satisfaction.

**Literature review:**

Anand & Hundal, B.S. (2007) examined the comparative buying behavior of rural and their urban counterparts towards the purchase of refrigerator. The factors considered by them: item of necessity, symbol of social status, advertising influence, brand reputation and time saving device (Punjab).

Gupta (1987) examined the factors motivating consumers to buy durables, the factors considered by them in making brand choice: source of information considered, role of family members in influencing brand choice and to examine consumer satisfaction (Amritsar City).

Shanthi, R. (2005) examined the Perceptual Dimensions of Brand Associations with reference to Mobile Users (Chennai City).

Shashikumar Sharma, L. & Chaubey, D.S. (2007) assessed the consumers' awareness and their attitude toward different mobile service providers operating in Lucknow.

**Research Methodology**

For the purpose of the study, both the rural and urban consumers are asked to rate the five mobile phone purchase motivators (Price, Quality, Style, Functions and Brand) on 5 – Point Likert (importance) scale for mobile phone: Extremely Important (5), Some-what Important (4), Neither-Important nor Unimportant (3), Some-what Important (2) and Extremely Unimportant (1), (Appendix 3). For the purpose of testing Hypothesis, the scores are averaged and standard deviation is calculated, then Z – Test is used to test the hypothesis, (Appendix 2). Additionally, percentage analysis is used to analyze the sub-objectives: Source of Information, Role of Family in decision making and Consumer Satisfaction, (Appendix 1).

The Z – Test is a parametric test to determine the statistical significance between a sample distribution mean and population parameter. The Z – Test is selected as parametric tests are more powerful because their data are derived from interval and ratio measurements. The Z – Test is used for two independent samples, large sample size and two tailed test, (Appendix 2).

**The Assumptions Made:**

1. The random sampling distribution of a statistic is approximately normal.
2. Values given by the samples are sufficiently close to the population value and can be used in its place for calculating the standard error of the estimate. (Gupta S.P., 2000)

The present study is mainly based on primary data. The mobile phone consumers belonging to both rural and urban areas of Jamnagar District (Gujarat), India are examined.

1. DATA SOURCE: The present study is mainly based on primary data from Jamnagar District.
2. RESEARCH APPROACH: Survey Research.
3. RESEARCH INSTRUMENT: Questionnaire both in English and Gujarati.
4. SAMPLING PLAN:
  - 1) SAMPLING UNIT: Data collected from users of mobile phone from Jamnagar District.
  - 2) SAMPLE SIZE: A sample of around 400 mobile users, 200 each from rural and urban areas from Jamnagar District is selected.
  - 3) SAMPLING PROCEDURE: In Jamnagar District there are 10 Talukas, Rural and Urban sample are selected on Judgment and Convenience basis.
  - 4) DATA ANALYSIS: For the purpose of study, both the rural and urban samples will be asked to rate the five mobile phone purchase motivators (Price, Quality, Style,

Functions and Brand) on 5 – Point Likert (importance) scale for mobile phone. The Z – Test is used for analysis.

**Data analysis and discussion:**

Following is the summarized result from analysis of data.

**Demographic Profile:**

- The demographic data (Table I) indicates that most of the respondents of rural sample fall in the age category of 20 to 30 years (37%) and of urban sample fall in the age category of below 20 years (47%).
- 84% of rural sample belong to male and 16% belong to female while in urban sample 53% belong to male and 48% belong to female.
- Educational profile of the rural sample indicates that most of the respondents are under-graduate (60%); in urban sample too most of the respondents are under-graduate (59%).
- Occupation profile of the rural sample indicates that most of the respondents are from service (36%) while in the urban sample most of the respondents are from students (other) (55%).
- Income profile of the rural sample indicates that most of the respondents are having monthly family income between Rs. 5,000 to Rs. 10,000 (47%), while in the urban sample most of the respondents are having monthly family income Rs. 10,000 and above (65%).

**Mobile phone used:**

- Information pertaining to the mobile phone used (Table II) indicates that in rural sample most of the respondents are having Nokia Phone (71%) and in urban sample too most of the respondents are having Nokia Phone (68%).

**Source of information:**

- The received information pertaining to Sources of Information (Table III) indicates that most of the respondents use Friends (rural-45%, urban-34%) followed by T.V. (rural-17%, urban 22%), Mobile Phone Retailer (rural-12%, urban-19%) and News Paper (rural-11%, urban-12%) as sources of information to purchase mobile phone.

**Purchase decision:**

- It is interesting that information regarding Purchase Decision (Table IV) indicates that most of the respondents from rural sample take self decision only (52%) even more than urban sample (43%), followed by family help (rural-29%, urban-41%) and friends' help (rural-18%, urban-13%) to make the purchase decision of mobile phone.

**Consumer satisfaction:**

- Respondents are asked whether they recommend their mobile phone to a friend, it is assumed that positive answer (yes) will indicate satisfaction and negative answer (no) will indicate dissatisfaction ( it is important to note that there are so many factors affect to the level of satisfaction and dissatisfaction).
- The received information pertaining to consumer satisfaction (Table V) indicates that most of the respondents are satisfied (rural-84%, urban-91%), yet few are dissatisfied (rural-16%, urban-10%) though the reasons are not known.

### The Motivational Factors:

The calculated value of Z – Test statistics at 5% level of significance indicates the following findings (Table VI):

- The difference between Price consciousness of rural and urban sample for purchase of mobile phone in Jamnagar District is not significant.
- The difference between Quality consciousness of rural and urban sample for purchase of mobile phone in Jamnagar District is significant.
- The difference between Style consciousness of rural and urban sample for purchase of mobile phone in Jamnagar District is not significant.
- The difference between Function consciousness of rural and urban sample for purchase of mobile phone in Jamnagar District is significant.
- The difference between Brand consciousness of rural and urban sample for purchase of mobile phone in Jamnagar District is significant.

The present study indicates that there is no significant difference of price and style consciousness for purchase of mobile phone between rural and urban consumers but there is significant difference of quality, functions and brand consciousness for purchase of mobile phone between rural and urban consumers. Study indicates that rural consumers are less quality, functions and brand conscious compare to urban consumers. The study indicates that rural consumer mostly use friends (45%), T.V. (17%) and mobile phone retailer (12%) as the source of information, the purchase decision is taken by self decision (52%), with the help of family (29%), and friends (18%) and most of rural consumers are satisfied (84%) in Jamnagar District.

### Limitation of the study:

The present study is confined to Jamnagar District only and the findings may not be applicable to the other states of the country because of socio-cultural differences. Further, consumer behavior being dynamic in nature, there is every possibility that over time and space findings of today may become invalid tomorrow.

### Conclusion

The father of the nation Mahatma Gandhi rightly stated that India lives in villages and villages constitutes the very heart of India. This has been aptly put by a Hindi poet “Bharat Mata Gram Vasini”, which means, Mother India lives in her villages.

In order to utilize the immense potential of rural market in India, companies need to develop specific marketing strategies and action plans taking into account the complex set of factors that influence consumer’s behavior. Rural marketing cannot succeed if the marketing strategy and action plans are only extrapolation or minor modification of the urban marketing strategy and plans. Innovative companies who adopted an integrated approach have succeeded in utilizing market opportunities that rural areas offer. (Jha Mithileshwar, 2007)

### References

- Anand & Hundal, B. S. (2007). Motivators for purchase of durables for rural and urban consumers of Punjab: A case study. *The ICFAI Journal of Management Research*, 7.
- Balaji Sathya Narayanan (2007). Rural marketing the road for sustainable growth. *Marketing Mastermind*, 8(5), 22-24.
- Cooper Donald, R. & Schindler Pamela, S. (2006). *Marketing research concepts and cases*. New Delhi, India: Tata McGraw Hill Publishing Company Limited.
- Karunakaran, K. (2007). Rural marketing. In Dr. Karunakaran K., *Marketing Management* (1<sup>st</sup> ed.) (pp. 277-292). Mumbai, India: Himalaya Publishing House.

- Khairoowala Ziauddin & Siddiqui Saif (2001). Buying behavior of rural consumer in haat markets – A case study of some selected villages of western Uttar Pradesh. *Indian Journal of Marketing*, 31(11-12), 14-24.
- Ganguly Parthasarathy & Kapse Sampada (2006, February). Rural communication: An integrated approach, *The ICFAI Journal of Marketing Management*, 5(1), 18-26.
- Gupta, S. P. (2000). Statistical interference – Test of hypothesis. In Gupta S.P., *Statistical Methods* (pp. A-3.1 – 3.71). New Delhi, India: Sultan Chand & Sons.
- Jha Mithileshwar (2007). Rural marketing in India. In Kotler Philip, Keller Kevin Lane, Koshy Abraham & Jha Mithileshwar, *Marketing Management* (12<sup>th</sup> ed.) (pp. A1 – A6). Delhi, India: Dorling Kindersley (India) Pvt. Ltd.
- Kashyap Pradeep. (2005). Selling to the hinterland. In Tony Joseph, *The Marketing Whitebook* (p. 89 – 104). New Delhi: ABP Pvt. Ltd.
- Malik Aman (2007, May 20). Consumer India 2025. *Business Today*, 16(10), 100 – 104.
- More proof that India's going all mobile. (2007, August 3-16), *4Ps*.
- Saxena Rajan (2007). Consumer behavior: Understanding the buyer. In Saxena Rajan, *Marketing Management* (3<sup>rd</sup> ed.) (pp. 148 – 177). New Delhi, India: Tata McGraw Hill Publishing Company Limited.
- Shanthi R. (2005, September). Perceptual dimensions of brand: A study with reference to mobile users. *The ICFAI Journal of Brand Management*, 2(3), 55 – 62.
- Sharma Shashikumar, L. & Chaubey, D S. (2007, February). Consumer behavior towards mobile service providers: An empirical study. *The ICFAI Journal of Marketing Management*, 6(1), 41 – 49.
- [www.marketresearch.com](http://www.marketresearch.com)

**APPENDIX 1:****Table I: Demographic Characteristics:**

Variables	Characteristics	Respondents					
		Rural		Urban		Total	
		No.	%	No.	%	No.	%
Age:	1. Below 20 Years	61	31%	94	47%	155	39%
	2. 20 to 30 Years	74	37%	64	32%	138	35%
	3. 30 to 40 Years	29	15%	17	9%	46	12%
	4. 40 to 50 Years	22	11%	20	10%	42	11%
	5. Over 50 Years	14	7%	5	3%	19	5%
		200	100%	200	100%	400	100%
Sex:	1. Male	168	84%	105	53%	273	68%
	2. Female	32	16%	95	48%	127	32%
		200	100%	200	100%	400	100%
Educational Qualification:	1. Under Graduate	120	60%	118	59%	238	60%
	2. Graduate	46	23%	43	22%	89	22%
	3. Post Graduate	20	10%	34	17%	54	14%
	4. Other	14	7%	5	3%	19	5%
		200	100%	200	100%	400	100%
Occupation:	1. Service	72	36%	61	30%	133	33%
	2. Business	45	23%	21	11%	66	17%
	3. Profession	7	4%	7	4%	14	4%
	4. Agriculture	22	11%	1	1%	23	6%
	5. Other	54	27%	110	55%	164	41%
		200	100%	200	100%	400	100%
Family Income: (Per Month)	1. Up to Rs. 5,000	65	33%	19	10%	84	21%
	2. Rs. 5,000 to Rs. 10,000	94	47%	51	26%	145	36%
	3. Rs. 10,000 and above	41	21%	130	65%	171	43%
		200	100%	200	100%	400	100%

**Table II: Mobile Phone Used:**

Sr. No.	Mobile Phone	Respondents					
		Rural		Urban		Total	
		No.	%	No.	%	No.	%
1	Nokia	142	71%	135	68%	277	69%
2	Motorola	9	5%	22	11%	31	8%
3	L.G.	2	1%	3	2%	5	1%
4	Reliance	14	7%	19	10%	33	8%
5	Sony	17	9%	12	6%	29	7%
6	Samsung	5	3%	4	2%	9	2%
7	TATA	9	5%	4	2%	13	3%
8	Other	2	1%	1	1%	3	1%
	Total	200	100%	200	100%	400	100%

**Table III: Sources of Information Used:**

Sr. No.	Sources of Information	Respondents					
		Rural		Urban		Total	
		No.	%	No.	%	No.	%
1	News Paper	21	11%	23	12%	44	11%
2	T.V.	34	17%	44	22%	78	20%
3	Internet	7	4%	7	4%	14	4%
4	Mobile Phone Retailer	23	12%	38	19%	61	15%
5	Magazine	2	1%	7	4%	9	2%
6	Radio	4	2%	1	1%	5	1%
7	Friends	90	45%	67	34%	157	39%
8	Other	19	10%	13	7%	32	8%
	Total	200	100%	200	100%	400	100%

**Table IV: Purchase Decision:**

Sr. No.	Purchase Decision	Respondents					
		Rural		Urban		Total	
		No.	%	No.	%	No.	%
1	Self Decision Only	104	52%	85	43%	189	47%
2	Friends	36	18%	25	13%	61	15%
3	Family	57	29%	81	41%	138	35%
4	Mobile Phone Retailer	2	1%	4	2%	6	2%
5	Other	1	1%	5	3%	6	2%
	Total	200	100%	200	100%	400	100%

**Table V: Consumer Satisfaction:**

Sr. No.	Consumer Satisfaction	Respondents					
		Rural		Urban		Total	
		No.	%	No.	%	No.	%
1	Satisfied	168	84%	181	91%	349	87%
2	Dissatisfied	32	16%	19	10%	51	13%
	Total	200	100%	200	100%	400	100%

**Table VI: THE Z – TEST (Two Tailed Test, Significance Level-0.05):**

Motivational Factors	Rural Sample		Urban Sample		Calculated Value(Z)	Critical Value	S/NS
	Mean	Stand. Dev.	Mean	Stand. Dev.			
Price	4.03	1.23	4.05	0.96	0.18	1.96	NS
Quality	4.57	0.72	4.74	0.69	2.43	1.96	S
Style	3.98	1.16	4.15	0.96	1.55	1.96	NS
Function	4.32	1.02	4.53	0.78	2.33	1.96	S
Brand	4.09	1.25	4.50	0.89	3.73	1.96	S

**Note:** NS-Not Significant, S-Significant.

**APPENDIX 2: THE TEST OF HYPOTHESIS (Z TEST):**

RURAL CONSUMER: 1

URBAN CONSUMER: 2

**1. PRICE (A):**

## 1. Null Hypothesis:

H0: There is no significant difference in the mean score of price of rural and urban consumer ( $\bar{X}_{A1} = X_{A2}$ ).

H1: There is significant difference in the mean score of price of rural and urban consumer ( $\bar{X}_{A1} \neq X_{A2}$ ).

## 2. Statistical Test:

The Z – Test is chosen because the data are interval and two samples are large and independent.

3. Significance Level:  $\alpha = 0.05$  (two - tailed test).

## 4. Calculated Value:

$$Z = \frac{\bar{X}_{A1} - \bar{X}_{A2}}{\sqrt{\frac{S_{A1}^2}{n_1} + \frac{S_{A2}^2}{n_2}}}$$

Where:

$$\bar{X}_{A1} = 4.03 \quad S_{A1} = 1.23 \quad n_1 = 200$$

$$\bar{X}_{A2} = 4.05 \quad S_{A2} = 0.96 \quad n_2 = 200$$

$$Z = \frac{|4.03 - 4.05|}{\sqrt{\frac{(1.23)^2}{200} + \frac{(0.96)^2}{200}}}$$

$$Z = 0.18$$

## 5. Critical Test Value: For 5% significance level and tow tailed test the critical value is 1.96.

## 6. Interpretation: Since the calculated value is less than the critical value (0.18 &lt; 1.96), we fail to reject the null hypothesis.

*There is no significant difference in the mean score of price of rural and urban consumer.*

## 2. QUALITY (B):

### 1. Null Hypothesis:

H0: There is no significant difference in the mean score of quality of rural and urban consumer ( $\bar{X}_{B1} = \bar{X}_{B2}$ ).

H1: There is significant difference in the mean score of quality of rural and urban consumer ( $\bar{X}_{B1} \neq \bar{X}_{B2}$ ).

### 2. Statistical Test:

The Z – Test is chosen because the data are interval and two samples are large and independent.

3. Significance Level:  $\alpha = 0.05$  (two - tailed test).

### 4. Calculated Value:

$$Z = \frac{\bar{X}_{B1} - \bar{X}_{B2}}{\sqrt{\frac{S_{B1}^2}{n_1} + \frac{S_{B2}^2}{n_2}}}$$

Where:

$$\bar{X}_{B1} = 4.57 \quad S_{B1} = 0.72 \quad n_1 = 200$$

$$\bar{X}_{B2} = 4.74 \quad S_{B2} = 0.69 \quad n_2 = 200$$

$$Z = \frac{|4.57 - 4.74|}{\sqrt{\frac{(0.72)^2}{200} + \frac{(0.69)^2}{200}}}$$

$$Z = 2.43$$

5. Critical Test Value: For 5% significance level and two tailed test the critical value is 1.96.

6. Interpretation: Since the calculated value is larger than the critical value ( $2.43 > 1.96$ ), we reject the null hypothesis.

*There is significant difference in the mean score of quality of rural and urban consumer.*

### 3. **STYLE (C):**

#### 1. Null Hypothesis:

H0: There is no significant difference in the mean score of style of rural and urban consumer ( $\bar{X}_{C1} = X_{C2}$ ).

H1: There is significant difference in the mean score of style of rural and urban consumer ( $\bar{X}_{C1} \neq X_{C2}$ ).

#### 2. Statistical Test:

The Z – Test is chosen because the data are interval and two samples are large and independent.

3. Significance Level:  $\alpha = 0.05$  (two - tailed test).

#### 4. Calculated Value:

$$Z = \frac{\bar{X}_{C1} - \bar{X}_{C2}}{\sqrt{\frac{S_{C1}^2}{n_1} + \frac{S_{C2}^2}{n_2}}}$$

Where:

$$\bar{X}_{C1} = 3.98 \quad S_{C1} = 1.16 \quad n_1 = 200$$

$$\bar{X}_{C2} = 4.15 \quad S_{C2} = 0.96 \quad n_2 = 200$$

$$Z = \frac{|3.98 - 4.15|}{\sqrt{\frac{(1.16)^2}{200} + \frac{(0.96)^2}{200}}}$$

$$Z = 1.55$$

5. Critical Test Value: For 5% significance level and tow tailed test the critical value is 1.96.

6. Interpretation: Since the calculated value is less than the critical value ( $1.55 < 1.96$ ), we fail to reject the null hypothesis.

*There is no significant difference in the mean score of style of rural and urban consumer.*

#### 4. **FUNCTIONS (D):**

##### 1. Null Hypothesis:

H0: There is no significant difference in the mean score of functions of rural and urban consumer ( $\bar{X}_{D1} = \bar{X}_{D2}$ ).

H1: There is significant difference in the mean score of functions of rural and urban consumer ( $\bar{X}_{D1} \neq \bar{X}_{D2}$ ).

##### 2. Statistical Test:

The Z – Test is chosen because the data are interval and two samples are large and independent.

3. Significance Level:  $\alpha = 0.05$  (two - tailed test).

##### 4. Calculated Value:

$$Z = \frac{\bar{X}_{D1} - \bar{X}_{D2}}{\sqrt{\frac{S_{D1}^2}{n_1} + \frac{S_{D2}^2}{n_2}}}$$

Where:

$$\bar{X}_{D1} = 4.32 \quad S_{D1} = 1.02 \quad n_1 = 200$$

$$\bar{X}_{D2} = 4.53 \quad S_{D2} = 0.78 \quad n_2 = 200$$

$$Z = \frac{|4.32 - 4.53|}{\sqrt{\frac{(1.02)^2}{200} + \frac{(0.78)^2}{200}}}$$

$$Z = 2.33$$

5. Critical Test Value: For 5% significance level and two tailed test the critical value is 1.96.

6. Interpretation: Since the calculated value is larger than the critical value ( $2.33 > 1.96$ ), we reject the null hypothesis.

*There is significant difference in the mean score of functions of rural and urban consumer.*

## 5. **BRAND (E):**

### 7. Null Hypothesis:

H0: There is no significant difference in the mean score of brand of rural and urban consumer ( $\bar{X}_{E1} = \bar{X}_{E2}$ ).

H1: There is significant difference in the mean score of brand of rural and urban consumer ( $\bar{X}_{E1} \neq \bar{X}_{E2}$ ).

### 8. Statistical Test:

The Z – Test is chosen because the data are interval and two samples are large and independent.

### 9. Significance Level: $\alpha = 0.05$ (two - tailed test).

### 10. Calculated Value:

$$Z = \frac{\bar{X}_{E1} - \bar{X}_{E2}}{\sqrt{\frac{S_{E1}^2}{n_1} + \frac{S_{E2}^2}{n_2}}}$$

Where:

$$\bar{X}_{E1} = 4.09 \quad S_{E1} = 1.25 \quad n_1 = 200$$

$$\bar{X}_{E2} = 4.50 \quad S_{E2} = 0.89 \quad n_2 = 200$$

$$Z = \frac{|4.09 - 4.50|}{\sqrt{\frac{(1.25)^2}{200} + \frac{(0.89)^2}{200}}}$$

$$Z = 3.73$$

11. Critical Test Value: For 5% significance level and tow tailed test the critical value is 1.96.

12. Interpretation: Since the calculated value is larger than the critical value ( $3.73 > 1.96$ ), we reject the null hypothesis.

*There is significant difference in the mean score of brand of rural and urban consumer.*

**APPENDIX 3: QUESTIONNAIRE:****Questionnaire****Consumer Behavior On Mobile Phone****Research Paper for Indian Institute of Management, Kozhikode****Chirag V. Erda (Lecturer in Shri D.D.Nagda B.B.A. College, Jamnagar)**

1. Name: \_\_\_\_\_
2. City / Village: \_\_\_\_\_
3. Age(Years): Below 20  20 to 30  30 to 40  40 to 50  Over 50
4. Sex: Male  Female
5. Educational Qualification:  
Under-Graduate  Graduate  Post-Graduate  Other \_\_\_\_\_
6. Occupation:  
Service  Business  Profession  Agriculture   
Other \_\_\_\_\_
7. Family Income (Per Month):  
Up to Rs.5,000  Rs.5,000 to Rs.10,000  Rs.10,000 and above
8. Do you have mobile phone? Yes  No
9. Which mobile phone do you use?  
Nokia  Motorola  LG  Reliance   
Sony  Samsung  TATA  Other \_\_\_\_\_
10. Which of the following information source/s have you used for the purchase of your mobile phone?  
News Paper  T.V.  Internet  Mobile Phone Retailer   
Magazine  Radio  Friends  Other \_\_\_\_\_
11. Who helped you to make a decision to purchase a mobile phone?  
Self-decision only  Friends   
Other \_\_\_\_\_  
Family  Mobile Phone Retailer
12. Please indicate the importance of each of the characteristics in choosing your mobile phone?  
Extremely Some-what Neither-Important Some-what  
Extremely  
Important Important nor Unimportant Unimportant  
Unimportant  
5 4 3 2 1
- 1) Price of Mobile: 5 4  3  2  1
- 2) Quality of Mobile: 5  4  3  2  1
- 3) Style of Mobile: 5 4  3  2  1
- 4) Functions of Mobile: 5  4  3  2  1
- 5) Brand name of Mobile: 5 4  3  2  1
13. Would you recommend this mobile phone to a friend? Yes  No
14. Please complete the sentence: My mobile is My \_\_\_\_\_

***Thank you for sharing your ideas about the mobile phone.***