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A Study on Customers Preference of Products through E-Commerce Portals with Special Reference to Varanasi and Prayagraj Districts

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ABSTRACT
One of the major changes currently emerging in the international business surroundings is fastest growing shopping through electronic commerce. The reason behind this the virtual dealers need to formulate marketing strategies to encounter the demand of e-commerce customers. For this purpose the various e-commerce portals need to study customers/consumers behavior in the area of e-commerce shopping in the small cities like; Varanasi and Prayagjaj. Accordingly, this paper is focused to analyze the preference of e-commerce customers for various products. This study is based on a primary data of 300 respondents of Varanasi and Prayagraj. The results are based by applying non-parametric technique like Mann Whitney U and Kruskal Wallis. This study has been found that medical and surgical items, food products are the most preferred products by the customers in the study area through e-commerce portals.
Key words- Emerging, international business, marketing strategies, e-commerce portals, consumer behavior, medical & surgical.

I. INTRODUCTION

E-commerce plays an important role in developing and distributing various products/services through e-commerce portals. There has been a histrionic change in the way of shopping in the present age of the markets. Such type of change becomes possible due to e-commerce which has been converted the world into a market whereas a people can buy anything through internet on clicking a button of phone or computer mouse. According to the University of California, Los Angeles (UCLA) communication policy (2001), shopping of goods and services through e-commerce is third most popular activity on the internet after email using and web browsing. Such type of quick development of e-commerce transaction is provided the way of digitalization in all over the world. Books, airline tickets reservations, clothing, shoes, videos games and other electronic products are the most popular items purchased on the internet by the people today by sitting in their homes or offices or work place. According to News India (Empowering Idea, Dec.2014) 13 billion people were doing purchases through online shopping which was expected to touch 75 million by the end of 2017 to over 220 million in 2025.

The purpose of this paper was to understand the preference of consumers for various products transaction through e-commerce portals .The study also analyzes the demographic profile of e-commerce buyers of the various types of products. The results of this article will help the e-commerce portals to make their strategies for their customers.

II. REVIEW OF LITERATURE

Dr. B.S. Bodla and Ms. Pinki (2017)- This research paper aims to find out the customers preference of the online products. The secondary objective of this study is to know the preference of customers in choosing the e-commerce portals for shopping. For this, the author has used the primary data to analyze the proposed objectives. It has been concluded in the study that electronic items is the first preference in the various products categories mostly available to the customers at e-commerce portal for shopping. Further, the study is also highlighted that the customers of the study area have

given the first preference to Flipkart to buy the products in comparison to Amazon and Snapdeal.

Arlina Nubaity Lubis (2018)- This paper aims to study customers preference of online shopping. The author has used the primary data of 200 respondents in Modern city, North Sumatera. For this, it has been used percentage and logistics regression analysis model to evaluate the data. As per analysis of the data it has been concluded in the study male customers are more preferred online shopping than the female. The study also reveals that the higher income of the customers motivate them to buy the products through e-commerce.

A. Meharaj Banu, M. Usha Rani and R. Malini (2014)- This paper aims to study how did socio-demographic affect consumers preference towards online shopping. An major objective of this paper is to identify the determinants of online purchase intensions among the customers. For this the author has used the primary data of 60 respondents as well as secondary data in Tiruchirappalli district. It has been used percentage, t-test and chi-square test in the study. As per the data analysis the study concluded that consumers preferred to online purchasing portals for their purchases whenever they perceived purchasing portals, variety in options and convenience in online shopping in the study area.

III. RESEARCH METHODOLOGY

As mentioned earlier this study was intended to find out preference order of various products through e-commerce portal in Varanasi and Prayagraj. To analyse the proposed objectives of the study primary data has been used. For the purpose of primary data collection, sample of 300 respondents have been taken from Varanasi and Prayagraj by following convenience sampling method. For the study, a structured questionnaire was constructed to collect the primary data and the structured questionnaire based on 5 point Likert scale and consists of rank 5 for strongly Agree, 4 for Neutral, 3 for Agree, 2 for Disagree and 1 for Strongly Disagree for product preference. The calculation in the analysis indicates highest value of mean rank for the least preferred product and vice-versa. The questionnaires were distributed and responses received from them personally. The data has been analysed by using statistical tools like Mean, Standard Deviation, Mann Whitney U and Kruskal Wallis test. To decide the appropriate test to be used to test the hypothesis of the study, first normality was checked by applying test of normality. As the data was not normally distributed, therefore non parametric test namely Mann Whitney, Kruskal Wallis were used by applying SPSS software.

Objectives of the Study-
1. To study demographic distribution of customers in Varanasi and Prayagraj districts
2. To study the preference of e-commerce shopping products by the customers in Varanasi and Prayagraj districts.

Hypotheses of the Study-
1. There is no significance difference between male and female respondents of the product preferences for online shopping.
2. There is no significance difference in age group of the respondents of the products preference.
3. There is no significance difference in monthly income of the respondents of products preference.
4. There is no significance difference in product preference of consumers on the basis of community.
5. There is no significance difference in product preference of consumers on the basis of educational qualification.
6. There is no significance difference in product preference of consumers on the basis of using internet in a day.
7. There is no significance difference in product preference of consumers on the basis of having children by them.

Analysis of the data-

Table 1- Demographic Profile of the Respondents

Demographic Variables	Frequency				Total Percentage
	Varanasi		Prayagraj		
Gender-	Number	Percentage	Number	Percentage	
Male	79	52.67	134	89.33	71
Female	71	47.33	16	10.67	29
Total	150	100	150	100	100
Age-Group-					

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15-25 Years	116	73.33	107	71.33	74.33
26-35 Years	25	16.67	36	24	20.33
36-45 Years	4	2.67	5	3.33	3
46-55 Years	4	2.67	2	1.33	2
Above 55 Years	1	0.67	0	0	0
Total	150	100	150	100	100
Monthly income (in □)					
Below Rs. 10,000	103	68.67	63	42	48.33
Rs.10,001-20,000	26	17.33	44	29.33	23.33
Rs.20,001-50,000	16	10.67	23	15.33	13
Rs.50,000-1,00,000	4	2.67	10	6.67	4.67
Above Rs.1,00,000	1	0.67	10	6.67	3.67
Total	150	100	150	100	100
Educational Qualification-					
Primary School	3	2	0	0	0
High School	6	4	5	3.33	3.67
Intermediate	33	22	26	17.33	19.67
Graduation	75	50	85	56.67	53.33
Post-Graduation and above	33	22	34	22.67	22.33
Total	150	100	150	100	100
Number of Children-					86.33 6.67 5.67 1 0.33 100
No Issue	137	91.33	122	81.33	
1	3	2	17	11.33	
2	9	6	8	5.33	
3	1	0.67	2	1.33	
Above 3	0	0	1	0.67	
Total	150	100	150	100	
Community					
General	58	38.67	51	34	36.33
OBC	68	45.33	95	63.33	54.33
SC	19	12.67	4	2.67	7.67
ST	5	3.33	0	0	1.67
Total	150	100	150	100	100

Source- Primary Data

To begin with, the sample is explained based on demographic characteristics of respondents. Table-1 presents distribution of respondents across demographics. The gender indicates that 71 respondents are male and 29 % female in the study area. The age-wise distribution of respondents show that the highest percentage (74.33%) of respondents belongs to age group of 15-25 year followed by 26-35 year (20.33%), the 3% respondents belongs to age group of 36-45 year and remaining 2% respondents belong to age group of 46-55 year. The income-wise distribution of respondents shows that the maximum percentage of respondents are from income category of Rs. below 10,000 (48.33%) followed by the income group of Rs. 10,001-20,000 (23.33%) and Rs. 20,001-50,000 (13%), 4.67% respondents belongs to income group of Rs. 50,000-1,00,000.Only (3.67%) respondents

are from income category of above Rs. 1,00,000. The educational qualification shows that 53.33 % of respondents have Graduation degree, 22.33 % have done Post graduate degree and only 3.67 % per cent respondents are up to 10th standard. The remaining 19 % belongs to belong to 12th standard as per education wise distribution of respondents. Number of children reveals that 86.33 % respondents have no child, 6.67 % respondents belongs to 1 child they

have, the respondents who have 2 children are 5.67 %, 1 % respondents have 3 children and remaining 0.33 % have more than 3 children in study area. In case of community in concerned OBC category contributes 54.33 % of the total respondents. While 36.33 % respondents come under General category and remaining 7.67 % and 1.67 % respondents come under the SC and ST category respectively.

Table 2- Order of product preference for online shopping: Gender wise analysis

Gender Mean & SD	Electronic items	Food items	Cloths	House ware items	Stationary items	Books	Automobiles	Medical and surgical
Male Mean S.D.	3.0892 1.04001	2.9343 .97390	3.3286 1.00234	3.2629 1.07123	3.2817 1.11824	3.5070 1.04890	3.0704 1.18549	2.9812 1.24371
Female Mean S.D.	3.1379 1.12242	2.9770 1.08881	3.3908 1.11393	3.0460 1.03326	2.9310 .98587	3.4943 1.17011	2.6897 1.19408	2.6437 1.22927
Mann–Whitney U Test	9030.500	9199.500	9096.500	8115.500	7432.000	9178.500	7586.500	7818.500
Wilcoxon W	31821.500	31990.500	31887.500	11943.500	11260.000	13006.500	11414.500	11646.500
Z	-.378	-.103	-.268	-1.775	-2.803	-.136	-2.534	-2.183
P-Value	.705	.918	.788	.076	.005	.892	.011	.029

Source- Primary Data

The above table presents the mean rank of product preference for online shopping by the consumers along with the results of Mann Whitney U test. It is obvious from the table that the highest mean rank in case of male respondents belongs to food items (2.9343) followed by Medical and Surgical items (2.9812), Automobiles (3.0704), Electronics (3.0852). Similarly, the lowest mean rank goes to Books (3.5070) with the mean value in case of Cloths (3.33286), Stationary Items (3.2817) and House ware items (3.2629). On the other hand, the female respondents have given highest preference to Medical and surgical items (2.6437). But the second, third and fourth level of ranks are found in case of Automobiles (2.6897), Stationary items (2.9610) and Food items (2.9770) respectively. Cloths, Books, Electronic items, House ware items are given lower rank as compared to the

rest of the product groups. It is inferred that the most preference of the male respondents for online shopping consists of food items followed by medical and surgical, automobiles and the lower preference is given to books. The female respondents have shown the first preference to buy medical and surgical in comparison of rest of the items through e-commerce portals in the study area.

Mann Whitney U test has been found significance difference between male and female respondents of the product preferences for online shopping. It is clear from the table that the p value is <.05 in case of all the product categories except three items namely stationary, automobiles and medical and surgical. Hence, the hypothesis of no significance difference in product preference for online shopping across gender is rejected.

Table 3-Order of product preference for online shopping: Age Group Wise analysis

Age-group (in year) Mean & SD	Electronic items	Food items	Cloths	House ware items	Stationary items	Books	Automobiles	Medical and surgical
15-25 Mean S.D.	3.0987 1.05657	2.9193 .97848	3.2870 1.03895	3.2108 1.05073	3.1749 1.08258	3.5561 1.08853	2.9417 1.17451	2.8744 1.24206
26-35 Mean S.D.	3.1148 .9679	2.9344 1.03068	3.4098 .97257	3.1803 1.04096	3.1311 1.02430	3.3115 .97538	2.9508 1.18920	2.9672 1.29057
36-45 Mean S.D.	2.6667 1.22474	3.0000 1.22474	3.8889 .92796	3.1111 1.36423	3.5556 1.23603	3.1111 1.36423	3.5556 1.50923	2.6667 1.00000
46-55 Mean S.D.	3.5000 1.76068	4.0000 1.26491	4.1667 1.33916	3.1667 1.60208	3.3333 1.96638	3.8333 1.32916	2.8333 1.83485	2.6667 1.63299

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<than 55 Mean	5.0000	3.0000	3.0000	3.0000	3.0000	5.0000	3.0000	3.0000
S.D.	--------	--------	--------	--------	--------	---------	--------	--------
Total Mean	3.1033	2.9466	3.3467	3.2000	3.1800	3.5033	2.9600	2.8833
SD	1.06290	1.00691	1.03443	1.06322	1.09159	1.8347	1.19855	1.24696
Chi-Square	4.432	4.409	7.180	.153	1.729	5.268	2.154	.762
df	4	4	4	4	4	4	4	4
P-Value	.351	.297	.127	.997	.785	.261	.707	.943

Source- Primary Data

The table presents the results regarding age wise order of product preference for online shopping and the table reveals that the total mean value of medical and surgical items is the lowest among various product categories under all age group. The respondents are belonging to age group 15-25 years, 36-45 years and 46-55 years have given to first preference to medical and surgical items. While the age group 26-25 years have given the first preference to food items. Similarly, the lowest preference has been given to books in case of all the age groups. The hypothesis namely the order of product preference for online shopping does not differ across various age groups, has been tested by applying Kruskal Wallis test. The outcome of the test as presented in the table under reference indicates p value <.05 in case of each product category and therefore, there is no significance difference in age group of order of products preference Hence, the above mentioned hypothesis has been rejected in all the age groups.

Table 4-Order of product preference for online shopping: Monthly Income Wise analysis

Monthly Income (in□) Mean & SD	Electronic items	Food items	Cloths	House ware items	Stationay items	Books	Automobil-es	Medical and surgical
>10,000 Mean	3.0542	2.8855	3.2530	3.1446	3.1566	3.5181	2.9940	2.9157
S.D.	1.05748	.99947	1.03096	1.08580	1.09525	1.09944	1.19340	1.21809
10,001-20,000 Mean	3.1429	3.0571	3.4000	3.3143	3.2000	3.4857	2.9571	2.9143
S.D.	.98224	.93073	.93870	.90958	1.06322	1.00351	1.16016	1.31593
20,001-30,000 Mean	3.4615	3.0769	3.6410	3.2051	3.2051	3.3846	2.8718	2.6923
S.D.	1.09655	1.17842	1.13525	1.23926	1.28103	1.16111	1.32147	1.30089
50,000-1,00,000 Mean	2.7143	2.7857	3.2143	3.2857	3.4286	3.5714	2.8571	2.8571
S.D.	1.06904	.97496	1.31140	.91387	1.28388	1.28388	1.29241	1.29241
More than 1,00,000 Mean	2.8182	2.9091	3.5455	3.1818	3.0000	3.7273	2.9091	2.9091
S.D.	1.32802	1.04447	.82020	1.25045	1.09545	.90453	1.13618	1.13618
Total Mean	3.1033	2.9467	3.3467	3.2000	3.1800	3.5033	2.9600	2.8833
SD	1.06290	1.00691	1.03443	1.06322	1.09159	1.08347	1.19855	1.24696
Chi-Square	6.840	2.184	4.053	1.177	1.039	1.038	.608	1.377
df	4	4	4	4	4	4	4	4
P-Value	.145	.702	.399	.882	.904	.904	.962	.848

Source- Primary Data

Table reveals the income wise order of the products preference for online shopping of the customers in the study area. The less than □10,000 income groups have the highest mean value (2.8855) of food items in all the products categories which shown the first preference of the customers. The mean value for medical and surgical is the highest (2.9143) and (2.6923) in all the products categories in□ case of the income group between □10,001-20,000 and □20,001-30,000 respectively. Further, the □50,000-1,00,000 income group and above □1,00,000 income groups have the highest mean value is 2.7143 and 2.8182 which shown the first preference of the customers. The hypothesis that the order of product preference for online shopping does not differ across various income groups, has been confirmed by Kruskal Wallis test. The outcome of the test as untaken in the table under mention indicates p value is <.05 in case of each product categories. Hence, the above expected hypothesis has been rejected in all the income groups. The above observation infers that the order of product preference for online shopping does not differ significantly across various income groups.

Table 5-Order of product preference for online shopping: Community Wise analysis

Community Mean & S.D.	Electronic items	Food items	Cloths	House ware items	Stationary items	Books	Automobiles	Medical and surgical
General Mean	3.1468	3.0367	3.4679	3.1927	3.1468	3.5413	3.0459	2.9541
S.D.	1.10408	.98061	1.05030	1.03169	1.06132	1.01409	1.21248	1.25746
OBC Mean	3.0552	2.8773	3.2761	3.2025	3.2454	3.5276	2.9264	2.8896
S.D.	1.00770	1.04688	1.01403	1.09522	1.13362	1.11838	1.19958	1.25711
SC Mean	3.0000	3.0870	3.2174	3.1739	2.9130	3.1304	2.7826	2.5217
S.D.	1.16775	.84816	1.04257	.93673	.90015	1.09977	1.20441	1.16266
ST Mean	4.5000	2.5000	3.7500	3.5000	3.0000	3.7500	2.7500	2.5000
S.D.	1.00000	1.00000	1.50000	1.73205	1.41421	1.50000	.95743	1.00000
Other Mean	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	4.0000	4.0000
S.D.	--------	--------	-------	--------	--------	--------	--------	--------
Total Mean	3.1033	2.9467	3.3467	3.2000	3.18000	3.5033	2.9600	2.8833
SD	1.06290	1.00691	1.03443	1.06322	1.09159	1.08347	1.19855	1.24696
Chi-Square	5.936	2.975	3.723	.187	2.264	2.776	1.971	3.441
df	4	4	4	4	4	4	4	4
P-Value	.204	.562	.445	.996	.687	.596	.741	.487

Source- Primary Data

Table exposes that the first preference for online shopping is given to medical and surgical items in all the communities except the other community. The mean rank for medical and surgical items is the highest (2.8833) in all community. The second preference has been given to food items and the third preference has been given to automobiles by the all community of customers in the study area. The lowest order of product preference may be seen in case of books by all community. The hypothesis mentioned in the study that the order of product preference for e-commerce shopping does not differ across various communities, have been tested by Kruskal Wallis test. The result of the test shown in the table under reference indicates p value is <.05 in each product categories. Hence, the above desired hypothesis has been rejected in all the income groups. From the above analysis suggests that the order of product preference for online shopping does not differ significantly across various communities in Varanasi and Prayagraj.

Table 6-Order of product preference for online shopping: Educational Qualification Wise analysis

Educational Qualification Mean & SD	Electronic items	Food items	Cloths	House ware items	Stationar-y items	Books	Automobiles	Medical and surgical
Primary Mean		2.0000	2.3333	2.0000	2.0000	2.0000	2.0000	2.0000
S.D.	2.3333 1.15470	1.00000	1.52753	1.00000	1.00000	1.00000	1.00000	1.00000
10th Mean	3.3636	3.5455	3.1818	3.4545	3.6364	3.7273	3.7273	3.5455
S.D.	.67420	.82020	.87386	.93420	1.12006	.90453	1.10371	1.03573
12th Mean	3.2881	2.9831	3.4746	3.5763	3.3729	3.5763	2.9153	2.9492
S.D.	1.9939	.99119	1.13496	1.03729	.96308	1.17742	1.22176	1.38245
Graduation Mean	3.0438	2.9688	3.3688	3.1063	3.2250	3.5250	2.9313	2.8375
S.D.	1.09514	1.03049	1.03779	1.05566	1.13797	1.08709	1.17694	1.19162
PG Mean	3.0746	2.8060	3.2537	3.1045	2.8806	3.4169	2.9851	2.8657
S.D.	.98954	.95725	.92676	1.04641	1.00788	.98703	1.22465	1.27797
Total Mean	3.1033	2.9467	3.3467	3.2000	3.1800	3.5033	2.9600	2.8833
SD	1.06290	1.00691	1.03443	1.06322	1.09159	1.08343	1.19855	1.24696
Chi-Square	5.448	8.210	3.953	14.151	10.798	6.118	6.476	5.172
df	4	4	4	4	4	4	4	4
P-Value	.244	.084	.412	.007	.029	.191	.166	.270

Source- Primary Data

The table shows the order of product preference for online shopping has given by the respondents on the basis of their educational qualification. It can be observed that the mean rank for cloths is the highest (3.1818) in case of those who are educated high school preferred cloths in the all products categories. The customers those have the qualification of 12th level mostly preferred the food products which mean value is highest in all the products categories. Medical and surgical has the highest mean value in case of graduation level qualification holders have given the first preference in all the categories. Besides, the respondents having education of PG level have given the first preference to food products. The Kruskal Wallis test indicates that p value for Chi-Square test is below .05 in case

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of house ware items, stationary items and hence, the null hypothesis of no significance difference in product preference of consumers on the basis of educational qualification has been accepted in case

of house ware items and stationary items. On the other hand, the p-value for chi-square test is <.05 in case of rest of the products categories. Therefore, the null hypothesis has been rejected.

Table 7-Order of product preference for online shopping: Use internet in a day Wise analysis

Use internet (in a day) Mean & SD	Electro nic items	Food items	Cloths	House ware items	Stationa-ry items	Books	Automo bil-es	Medical and surgical
1-2 hrs. Mean	3.0000	2.9028	3.17361.06	3.0764	3.1389	3.3889	2.9236	2.7986
S.D.	1.03775	1.01953	653	1.07143	1.07490	1.12263	1.20651	1.22091
3-4 hrs. Mean	3.1359	3.0485	3.5049	3.3592	3.2330	3.6214	2.9806	3.0000
S.D.	1.12065	.98398	1.03728	1.04651	1.11323	1.08570	1.22859	1.27572
5-6 hrs. Mean	3.3824	2.8235	3.5000	3.1176	3.1765	3.5294	3.1765	2.9118
S.D.	1.10137	1.02899	.86164	1.03762	1.08629	.99195	1.16698	1.28788
<6 hrs. Mean	3.2105	2.9474	3.5263	3.4211	3.2105	3.6842	2.7368	2.8424
S.D.	.78733	1.02598	.90483	1.07061	1.18223	.88523	1.04574	1.25889
Total Mean	3.1033	2.9467	3.3467	3.2000	3.1800	3.5033	2.9600	2.8833
SD	1.6290	1.00691	1.03443	1.06322	1.09159	1.08347	1.9855	1.24696
Chi-Square	3.313	2.567	9.252	4.972	.316	3.492	1.760	1.491
df	3	3	3	3	3	3	3	3
P-Value	.346	.463	.026	.174	.957	.322	.624	.684

Source- Primary Data

Table shows the order of product preference for online shopping has given by the respondents on the basis of their internet using period in a day. It is observed that the mean rank for medical and surgical has the highest (2.7986) in case of those who use the internet 1-2 hrs. in a day mostly preferred medical and surgical items in the all products categories. The customers who use the internet 3-4 hours in a day mostly preferred the automobiles has the highest mean value in all the products categories. Food products have the highest mean value of 2.8235 in case of 5-6 hours internet

use by customers, given the first preference in all the categories. The customers who have used internet more than 6 hours in a day preferred automobiles in the study area. The Kruskal Wallis test indicates the p- value which is <.05 in case of each product categories except cloths. Hence, the above mentioned hypothesis has been rejected in all the internet using groups except the cloths groups. The above observation implies that the order of product preference for online shopping does not differ significantly on the basis of use internet in a day in the study area.

Table 8-Order of product preference for online shopping: Number of children Wise analysis

Number of children Mean & SD	Electronic items	Food items	Cloths	House ware items	Stationary items	Books	Automobiles	Medical and surgical
No Issue Mean	3.0849	2.8880	3.2857	3.1622	3.1544	3.4865	2.9228	2.8378
S.D.	1.04201	.99564	1.02839	1.05505	1.07801	1.09386	1.17871	1.22820
1 Mean	3.0500	3.3000	3.6500	3.6500	3.5500	3.6000	3.2500	3.4000
S.D.	1.05006	.86450	.81273	.87509	.88704	.94032	1.20852	1.35336
2 Mean	3.2941	3.4118	3.7647	3.2941	2.9412	3.5882	2.8235	3.0000
S.D.	1.31171	1.22774	1.20049	1.35852	1.39062	1.12132	1.33395	1.41421
3 Mean	3.3333	3.3333	3.6667	3.3333	3.6667	4.3333	4.3333	3.0000
S.D.	1.52753	.57735	1.15470	.57735	1.15490	1.15470	1.15470	1.00000
Above 3 Mean	5.0000	2.0000	5.0000	2.0000	5.0000	5.0000	5.0000	2.0000
S.D.	--------	--------	-------	--------	---------	--------	-------	-------
Total Mean	3.1033	2.9467	3.3467	3.2000	3.1800	3.5033	2.9600	2.8833
SD	1.062290	1.00691	1.03443	1.06322	1.09159	1.08347	1.19855	1.24696
Chi-Square	2.816	8.308	8.611	6.111	5.932	4.798	7.701	4.625
df	4	4	4	4	4	4	4	4
P-Value	.589	.081	.072	.191	.204	.309	.103	.328

Source-Primary Data

Table displays the order of product preference for online shopping has given by the

respondents on the basis of number of children by them. It is observed that the mean rank for medical

and surgical is the highest (2.8378) in case of those who have no children given the first preference to medical and surgical items in the all products categories. The customers who have only 1 child have given first preference to electronics which mean value (3.0500) is the highest in all the products categories. Automobiles have the highest mean value of 2.8235 in case of those who have 2 children has given the first preference in all the categories. The customers who have 3 or more children preferred medical and surgical items in the study area. The Kruskal Wallis test indicates p-value of <.05 in case of each product categories. Hence, the above mentioned hypothesis has been rejected in all the groups of having children. The above observation implies that the order of product preference for online shopping does not differ significantly on the having children by customers in Varanasi and Prayagraj.

IV. MAJOR FINDINGS

➢ It has been found from the study that the highest mean rank of male respondents is 2.9343 in case of food items which shows that the first preference is given by male respondents to food items than the other products available on e-commerce portals for purchase.

➢ It has been found from the study that the highest mean rank of female respondents is 2.6437 in case of medical and surgical items which shows that the first preference is given by female respondents to medical and surgical items when compared to other products available on e-commerce portals for purchase.

➢ The study reveals that the lowest mean rank of male and female respondents are 3.5070 and 3.4943 respectively in case of books which indicates that male as well as female respondents have not shown much interest to purchase the books through e-commerce portals.

➢ Further, the study also indicated that the p-value is < .05 in case of 5 products out of 8 products available to male and female respondents to purchase rejected the null hypothesis. But rest of 3 products has the p-value less than .05 in case of stationary, automobiles and medical and surgical accepted the null hypothesis.

➢ It has been found from the study that highest mean rank is 2.8744 in case of medical and surgical items proves that the first preferred products at e-commerce shopping by the customers of 15-25 age group.

➢ The minimum mean rank 3.5561 of books shows the least interest of 15-25 age group respondents to buy books through e-commerce.

➢ It has been found from the study that the first preference has been given by the customers of 26-35 age groups is food items.

➢ The highest mean rank 2.6667 of electronic items and medical and surgical items proves that the 36-45 and 46-55 age group respondents are given the first preference to electronic items as well as medical and surgical items.

➢ The analysis reveals that cloths have the minimum mean rank in all the age group respondents which shows the least preference has been given in these types of products.

➢ The respondents who earned monthly income less than □10,000 have given the first preference to food products.

➢ It is found in the study that the mean rank of medical and surgical items has the highest mean value in case of □10,001-20,000 and □20,001-30,000 income group which clearly shows the first preference of the respondents in the study area.

➢ The study reveals that 4 income group out of 5 of respondents in study area have not shown any willing to buy books through e-commerce portals.

➢ The study exposed the highest mean rank in General, SC and ST category is 2.9541, 2.5217 and 2.500 respectively which has shown the first preference has been given by them is surgical items except OBC.

➢ It is found from the study that the customers having the qualification of 12[th]level and PG level mostly preferred the food products which mean value is highest in all the products categories. Medical and surgical has the highest mean value in case of graduation level qualification holders have given the first preference in all the categories.

V. CONCLUSION

From the analysis it is revealed that at the overall level, medical and surgical items is given the first preference by the respondents among various products available to them for shopping through e-commerce portals. The second and third preferences of the respondents were food items and automobiles respectively when compared to House ware items and stationary items which were least preferred product categories. Besides, from the above finding holds true irrespective of age gender, education and income, community, number of children they have and use internet in a day by the respondents, while opting preference for the e-commerce products. As per the result it is also concluded that the male respondents are opted more in online shopping in comparison with female respondents and further high income and higher education motivate them to buy more costly products through e-commerce portals in Varanasi and Prayagraj districts.

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