



## STUDY OF MARKET MIX FOR THE BRAND PREFERENCES FOR PERSONAL CARE PRODUCTS: A DEMOGRAPHIC COMPARISON for HUL and ITC

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**ABSTRACT-** Demographic segmentation is perhaps the most commonly used and most easy or natural segmentation to assess. However, it is useful only when demographic variables are correlated with the relevant objective function, such as purchase behavior or brand preferences. The present study is related with the purchase behavior influenced by demographic with respect to brand preferences affected by market mix. Market mix affects the purchase decision for personal care product as they are substitute or very close to each other. The present study analyzes the impact of market mix on the brand preferences of different brands of HUL and ITC for different demographic segments. The brand preferences are taken on nominal scale by allowing multiple ticks for brand preferences. A scale consisting 15 statements on likert scale were used to get the responses about market mix. Five factors of market mix were taken into consideration for the present study namely price, promotion, distribution, product and packaging. Each factor is reliable as cronbach  $\alpha$  is above 0.7 for every factor.

**Key words:** Market segmentation, Demographics, market mix, brand preferences

### I. INTRODUCTION

Demographic segmentation is the most commonly used and most easy or natural segmentation to assess. It has been widely described in the literature that demographic characteristics is an important factor to determine fruit intake (Turrell et. al, 2002). But demographic variables are losing their importance because of the cultural and social changes. Demographic are no more good for segmentation (Yenkelovich, 1968). However, demographic variables are useful only when they are correlated with the relevant objective function, such as purchase behavior or brand preference (Matsuno, 1998). The present study is related with the purchase behavior influenced by demographic variables and the brand preferences affected by market mix. Consumer behaviour is not only influenced by the demographic but also market mix plays an important role in the brand preferences for personal care products. As there are lot of choices available for personal care products in the market. Market mix affects the purchase decision for personal care product as they are substitute or very close to each other. The present study analyzes the impact of market mix on the brand preferences of different brands of HUL and ITC as per the demographic variables. The brand preferences are taken on nominal scale by allowing multiple ticks for brand preferences. A scale consisting 15 statements on likert scale is used to get the responses about market mix. Five factors of market mix were taken into consideration for the present study namely price, promotion, distribution, product and packaging. Each factor is reliable as cronbach  $\alpha$  is above 0.7 for every factor.

The study has taken eight brand of personal care industry in total from HUL and ITC. Three major segments of personal care industry have taken into consideration for the study as hair care, skin care and body wash. Lux, dove From HUL and Vivel and fiamma di wills gel from ITC were taken from segment of body wash. Dove shampoo from HUL and Fiamma di wills shampoo from ITC were taken from hair care segment. Fair and lovely from HUL and Vivel active fair from ITC were taken from skin care segment.

Three demographic variables are taken to analyze the impact of market mix on different demographic variable for personal care brands offered by HUL and ITC. Gender, age and income are taken for the study as study variables.

## OBJECTIVES

1. To study the impact of market mix on brand preferences for personal care products with respect to gender.
2. To study the impact of market mix on brand preferences for personal care products with respect to age.
3. To study the impact of market mix on brand preferences for personal care products with respect to income.

## HYPOTHESES

H0: There is no impact of market mix on the brand preferences for personal care products with respect to gender.

H0: There is no impact of market mix on the brand preferences for personal care products with respect to age.

H0: There is no impact of market mix on the brand preferences for personal care products with respect to income.

## II. RESEARCH METHODOLOGY

The present study focus on the eight brands of different segments of personal care sector offered by HUL and ITC.

### Brands in hair care segments:

Brand of HUL: Dove Shampoo

Brand of ITC: Fiamma Di wills shampoo

### Brands in skin care segment:

HUL: Fair & Lovely

ITC: Vivel active fair

### Brands in body wash segment:

HUL: Lux, Dove Soap

ITC: Vivel, Fiamma di wills gel bar

### Demographic variables used in study:

- Gender
- Age
- Income

### Sampling Design:

The present study is conducted in region of Haryana and a sample of 400 consumers is selected from the four districts of Haryana which are randomly selected out of each zone of the state. Multistage random sampling is used to draw the sample.

### Tools and Techniques:

To analyze the impact of market mix on the brand preferences of personal care industry **logistic regression** was used. Logistic regression is a branch of regression which deals with non metric data. Here in the present study market mix data was of metric in nature but preferences are of nominal type that is why regression cannot be applicable.

One of the most common scales was used in the study that is Likert scale. It was developed by Rensis Likert in 1932. The Likert scale can be four-point, five-point, six-point, and so on. The even-numbered scale usually forces a respondent to choose while the odd-numbered scale provides an option for indecision or neutrality. The five point scale was used in the study as 1=strongly disagree, 2=disagree, 3=not sure, 4=agree, and 5=strongly agree.

### III. RESULTS AND FINDINGS

#### Analysis of market mix for brand preferences with respect to demographical variables: Gender wise analysis of market mix for brand preference of personal care products

Gender		B	S.E.	Wald	Df	Sig.	Exp(B)
Male	Price	-.114	.126	.815	1	.367	.892
	Promotion	.499	.202	6.078	1	<b>.014</b>	1.646
	Product	.173	.142	1.485	1	.223	1.189
	Dist	-.072	.143	.255	1	.614	.930
	Package	.183	.143	1.651	1	.199	1.201
	Constant	-3.360	1.231	7.453	1	.006	.035
Female	Price	-.010	.131	.006	1	.936	.990
	Promotion	-.038	.194	.038	1	.845	.963
	Product	-.245	.159	2.389	1	.122	.782
	Dist	.147	.145	1.030	1	.310	1.158
	Package	.291	.165	3.125	1	.077	1.338
	Constant	-.751	1.317	.325	1	.569	.472

The tables 1.1 shows that promotion for dove shampoo are significantly affecting the preference for the brand as the p-value is less than 0.05 in case of promotion but rest four factors of market mix are not affecting the brand preference of dove shampoo. It is clearly depicts from the table that consumers understand the price, packaging for dove, they are preferring dove because of the promotional influence. It also depicts from the table that only male are influenced by advertising not female. Company should focus on the female consumers because in case of personal care products female use to purchase more.

Gender		B	S.E.	Wald	Df	Sig.	Exp(B)
Male	Price	.053	.122	.189	1	.663	1.054
	promotion	-.189	.172	1.199	1	.274	.828
	product	-.037	.133	.075	1	.784	.964
	Dist	-.074	.138	.289	1	.591	.929
	Package	-.297	.137	4.677	1	<b>.031</b>	.743
	Constant	2.118	1.115	3.608	1	.058	8.315
Female	Price	-.027	.129	.043	1	.836	.974
	Promotion	.035	.190	.033	1	.855	1.035
	Product	-.007	.156	.002	1	.963	.993
	Dist	-.082	.142	.336	1	.562	.921
	Package	-.247	.158	2.462	1	.117	.781
	Constant	1.297	1.290	1.010	1	.315	3.658

Table 1.2 discusses logistic regression for market mix and brand preference for fiamma di wills with respect to the gender. Further analysis shows that there is no significant impact of market mix on the brand preference of male and female. But for male packaging is significantly affecting the brand preference of male

for fiamma di wills ( $p < 0.05$ ). However, the other factors of market mix are not found significant for male and female.

Gender		B	S.E.	Wald	Df	Sig.	Exp(B)
Male	Price	-.212	.123	2.982	1	.084	.809
	Promotion	.050	.170	.085	1	.771	1.051
	Product	.229	.135	2.890	1	.089	1.257
	Dist	-.012	.137	.007	1	.932	.988
	Package	-.049	.134	.136	1	.712	.952
	Constant	-.177	1.097	.026	1	.872	.838
Female	Price	-.069	.130	.285	1	.594	.933
	Promotion	.215	.191	1.264	1	.261	1.240
	Product	.063	.158	.157	1	.692	1.065
	Dist	-.243	.144	2.858	1	.091	.784
	Package	.192	.155	1.522	1	.217	1.211
	Constant	-.795	1.284	.383	1	.536	.452

It is observe from table 1.3 that there is no significant impact of market mix for male and female in case of popular brand of HUL that is fair and lovaly ( $p > 0.05$ ). It means that the sale or preference of the product does not depend upon the offered market mix but some other factors are playing significant role.

Gender		B	S.E.	Wald	Df	Sig.	Exp(B)
Male	Price	-.066	.120	.305	1	.581	.936
	promotion	-.057	.169	.114	1	.735	.945
	product	-.055	.132	.171	1	.679	.947
	Dist	-.043	.136	.101	1	.751	.958
	Package	.049	.132	.138	1	.710	1.050
	Constant	.606	1.087	.311	1	.577	1.834
Female	Price	.119	.130	.836	1	.361	1.126
	promotion	-.519	.206	6.333	1	<b>.012</b>	.595
	product	-.065	.158	.170	1	.680	.937
	Dist	.106	.145	.537	1	.464	1.112
	Package	-.037	.156	.056	1	.813	.964
	Constant	1.935	1.328	2.122	1	.145	6.923

Table 1.4 analyzes the impact of market mix on the preference of vivel active fair for male and female separately with logistic regression. It is observed from the analysis that only female get influenced by promotional activities and prefer the brand ( $p < 0.05$ ). However, male are not affected by any of market mix ( $p > 0.05$ ).

Gender		B	S.E.	Wald	Df	Sig.	Exp(B)
Male	Price	-.040	.131	.094	1	.759	.961
	promotion	-.190	.179	1.128	1	.288	.827

	product	-.078	.143	.301	1	.583	.925
	Dist	.301	.145	4.326	1	.038	1.351
	Package	.014	.145	.009	1	.924	1.014
	Constant	-.362	1.160	.097	1	.755	.696
Female	Price	-.113	.132	.725	1	.395	.893
	promotion	.464	.215	4.665	1	.031	1.591
	product	.051	.161	.100	1	.752	1.052
	Dist	.183	.147	1.552	1	.213	1.200
	Package	.208	.164	1.593	1	.207	1.231
	Constant	-3.385	1.409	5.774	1	.016	.034

Table 1.5 examines the impact of market mix on the preference of lux for male and female. It is evident from the analysis that both male and female prefer lux by the influence of market mix. But different market mix affect male and female. As male are having significant influence of distribution or availability of lux ( $p < 0.05$ ). However, female are getting influence from the promotions for the product ( $p < 0.05$ ).

Table 1.6 : Gender wise analysis of market mix for Dove soap							
Gender		B	S.E.	Wald	Df	Sig.	Exp(B)
Male	Price	-.074	.122	.371	1	.543	.929
	promotion	-.200	.170	1.384	1	.239	.819
	product	-.076	.133	.330	1	.566	.927
	Dist	.088	.137	.408	1	.523	1.092
	Package	-.062	.133	.215	1	.643	.940
	Constant	1.087	1.098	.981	1	.322	2.965
Female	Price	.071	.132	.289	1	.591	1.073
	promotion	.061	.198	.095	1	.757	1.063
	product	-.255	.157	2.648	1	.104	.775
	Dist	-.105	.148	.507	1	.476	.900
	Package	.055	.159	.119	1	.731	1.056
	Constant	.051	1.313	.002	1	.969	1.053

It is evident from the table 1.6 that there is no significant impact of market mix on male and female's brand preference for dove ( $p > 0.05$ ). Male respondent as well as female respondent must be affected by some other factors.

Table 1.7 : Gender wise analysis of market mix for Vivlel soap							
Gender		B	S.E.	Wald	Df	Sig.	Exp(B)
Male	Price	.057	.121	.223	1	.637	1.059
	promotion	.082	.171	.233	1	.629	1.086
	Product	.071	.133	.288	1	.591	1.074
	Dist	-.143	.138	1.073	1	.300	.867
	Package	.030	.133	.051	1	.822	1.030
	Constant	-.776	1.098	.499	1	.480	.460
Female	Price	.018	.130	.019	1	.892	1.018
	promotion	-.077	.190	.165	1	.685	.926
	product	.162	.160	1.025	1	.311	1.176
	Dist	-.016	.143	.012	1	.913	.984
	Package	-.165	.154	1.151	1	.283	.848

	Constant	.003	1.283	.000	1	.998	1.003
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Table 1.7 exhibits the results of logistic regression of market mix on brand preference of vivel for male and female. It is evident from the table 1.7 that there is no significant impact of market mix on male and female's brand preference for vivel ( $p > 0.05$ ). Male respondent as well as female respondent must be affected by some other factors.

Gender		B	S.E.	Wald	Df	Sig.	Exp(B)
Male	Price	-.212	.129	2.685	1	.101	.809
	promotion	-.080	.181	.196	1	.658	.923
	product	.069	.139	.243	1	.622	1.071
	Dist	-.177	.141	1.568	1	.210	.838
	Package	.037	.140	.072	1	.789	1.038
	Constant	1.683	1.156	2.119	1	.145	5.384
Female	Price	-.094	.135	.488	1	.485	.910
	promotion	-.479	.224	4.588	1	<b>.032</b>	.619
	product	.110	.162	.458	1	.498	1.116
	Dist	.045	.151	.090	1	.764	1.046
	Package	-.354	.175	4.101	1	<b>.043</b>	.702
	Constant	3.687	1.458	6.398	1	.011	39.936

Table 1.8 discusses the impact of market mix on the preference of fiamma di wills for male and female separately. It is shown in the table that male are not affecting by market mix bur female are significantly affected by market mix for their preference for fiamma di wills. Promotion and packaging are significantly affect the preference of female ( $p < 0.05$ ).

#### Age wise analysis of market mix for brand preference of personal care products

Age		B	S.E.	Wald	df	Sig.	Exp(B)
18-35	Price	.391	.169	5.377	1	<b>.020</b>	1.478
	Promotion	.382	.240	2.522	1	.112	1.465
	Product	.003	.191	.000	1	.987	1.003
	Dist	-.013	.184	.005	1	.943	.987
	Package	.188	.188	1.001	1	.317	1.207
	Constant	-4.237	1.629	6.768	1	.009	.014
36-45	Price	-.253	.141	3.235	1	.072	.776
	promotion	.093	.208	.202	1	.653	1.098
	product	.006	.161	.002	1	.968	1.007
	Dist	-.089	.147	.365	1	.546	.915
	Package	.283	.165	2.952	1	.086	1.327
	Constant	-.744	1.325	.315	1	.574	.475
above 45	Price	-.309	.189	2.669	1	.102	.734
	promotion	.322	.297	1.177	1	.278	1.380
	product	.081	.214	.145	1	.704	1.085
	Dist	.479	.235	4.169	1	<b>.041</b>	1.614
	Package	.352	.237	2.212	1	.137	1.423
	Constant	-3.529	1.963	3.232	1	.072	.029

Table 1.9 indicates the impact of market mix on preference of different age groups. It clearly depicts from the table that the younger age group is significantly affected by price ( $p < 0.05$ ). Middle age group is not significantly affected by any of market mix ( $p > 0.05$ ). The mature and quit older age segment is significantly affected by the distribution or the availability of the product for the preference of the brand ( $p < 0.05$ ).

Age		B	S.E.	Wald	df	Sig.	Exp(B)
18-35	Price	.111	.152	.532	1	.466	1.118
	promotion	-.134	.203	.437	1	.509	.874
	product	-.028	.178	.025	1	.874	.972
	Dist	-.067	.172	.150	1	.698	.936
	Package	-.216	.170	1.609	1	.205	.806
	Constant	1.256	1.414	.789	1	.374	3.511
36-45	Price	.034	.139	.060	1	.806	1.035
	promotion	-.212	.209	1.029	1	.310	.809
	product	-.077	.161	.230	1	.632	.926
	Dist	-.100	.146	.465	1	.495	.905
	Package	-.325	.168	3.744	1	.053	.723
	Constant	2.829	1.347	4.414	1	.036	16.934
above 45	Price	-.161	.177	.828	1	.363	.851
	promotion	.161	.269	.361	1	.548	1.175
	product	.043	.203	.045	1	.832	1.044
	Dist	-.086	.222	.151	1	.698	.918
	Package	-.282	.216	1.699	1	.192	.754
	Constant	.971	1.783	.297	1	.586	2.641

Table 1.10 discusses the logistic regression for showing the impact of market mix on the brand preferences of different age groups. It is evident from the table that no age group is affected or influenced by any of market mix for the preference of the brand fiamma di wills soap ( $p > 0.05$ )

Age		B	S.E.	Wald	df	Sig.	Exp(B)
18-35	Price	-.462	.162	8.091	1	.004	.630
	promotion	.014	.206	.004	1	.947	1.014
	product	.086	.182	.225	1	.635	1.090
	Dist	.154	.177	.751	1	.386	1.166
	Package	.116	.173	.447	1	.504	1.123
	Constant	.471	1.430	.108	1	.742	1.601
36-45	Price	-.118	.141	.699	1	.403	.889
	promotion	.170	.207	.673	1	.412	1.185
	product	.341	.164	4.339	1	.037	1.406
	Dist	-.267	.150	3.192	1	.074	.766
	Package	.205	.162	1.615	1	.204	1.228
	Constant	-1.688	1.321	1.633	1	.201	.185
above 45	Price	.189	.181	1.093	1	.296	1.208
	promotion	.298	.272	1.199	1	.274	1.347
	product	.007	.206	.001	1	.973	1.007
	Dist	-.259	.225	1.326	1	.250	.772
	Package	-.271	.219	1.536	1	.215	.762
	Constant	-.056	1.782	.001	1	.975	.946

Table 1.11 explains logistic regression of market mix on the brand preference of fair and lovely for different age groups. It is observe from the analysis that for the young age group price is significantly affecting their preference for the product ( $p < 0.05$ ). Whereas the middle age group is affected by product for their

preferences for fair and lovely ( $p < 0.05$ ). But the upper age group is not significantly affected by any of the market mix for the preference of fair and lovely ( $p > 0.05$ ).

Age		B	S.E.	Wald	Df	Sig.	Exp(B)
18-35	Price	.297	.157	3.602	1	.058	1.346
	promotion	-.006	.205	.001	1	.978	.994
	product	-.161	.184	.770	1	.380	.851
	Dist	-.052	.176	.087	1	.768	.949
	Package	.329	.174	3.586	1	.058	1.390
	Constant	-1.348	1.432	.886	1	.347	.260
36-45	Price	-.125	.138	.815	1	.367	.883
	promotion	-.405	.210	3.725	1	.054	.667
	product	.078	.158	.240	1	.624	1.081
	Dist	-.085	.146	.340	1	.560	.918
	Package	.090	.159	.318	1	.573	1.094
	Constant	1.472	1.316	1.251	1	.263	4.359
above 45	Price	-.044	.196	.051	1	.821	.957
	promotion	-.666	.327	4.161	1	.041	.514
	product	.071	.226	.098	1	.754	1.074
	Dist	.581	.270	4.621	1	.032	1.788
	Package	-.610	.253	5.821	1	.016	.543
	Constant	4.045	2.106	3.688	1	.055	57.093

Table 1.12 shows the impact of market mix on the brand preference of vivel active fair for the different age groups. It is evident from the above table that young and middle age group respondents are not significantly affected by any of market mix for their brand preferences ( $p > 0.05$ ). But the mature age group of above 45 is significantly affected by promotion ( $p < 0.05$ ), distribution and packaging of the brand ( $p < 0.05$ ).

Age		B	S.E.	Wald	Df	Sig.	Exp(B)
18-35	Price	.111	.161	.479	1	.489	1.118
	promotion	-.088	.211	.175	1	.675	.915
	product	-.150	.185	.661	1	.416	.860
	Dist	.177	.179	.980	1	.322	1.194
	Package	.221	.185	1.433	1	.231	1.248
	Constant	-1.343	1.480	.824	1	.364	.261
36-45	Price	-.187	.149	1.572	1	.210	.830
	promotion	.052	.220	.057	1	.811	1.054
	product	.150	.176	.733	1	.392	1.162
	Dist	.255	.153	2.782	1	.095	1.291
	Package	.168	.176	.909	1	.340	1.183
	Constant	-2.197	1.414	2.414	1	.120	.111
above 45	Price	-.157	.180	.760	1	.383	.855
	promotion	.412	.301	1.872	1	.171	1.509
	product	-.114	.205	.311	1	.577	.892
	Dist	.219	.225	.950	1	.330	1.245
	Package	-.098	.215	.208	1	.648	.906
	Constant	-1.313	1.882	.487	1	.485	.269

It is observe from the table 1.13 that none of the age group of respondent is affected by any of the market mix for the brand preference of lux ( $p > 0.05$ ). It is clearly shows from the table that market mix is not playing significant role in making the brand preference for lux in any of the stated age groups.



Table 1.14 : Age wise analysis of market mix for Dove soap							
Age		B	S.E.	Wald	df	Sig.	Exp(B)
18-35	Price	.143	.156	.833	1	.361	1.153
	promotion	-.263	.205	1.657	1	.198	.769
	Product	-.238	.180	1.735	1	.188	.789
	Dist	.151	.174	.754	1	.385	1.163
	Package	.017	.172	.010	1	.919	1.018
	Constant	.731	1.417	.267	1	.606	2.078
36-45	Price	-.190	.140	1.828	1	.176	.827
	promotion	.293	.221	1.763	1	.184	1.341
	Product	-.191	.159	1.439	1	.230	.826
	Dist	-.039	.148	.068	1	.795	.962
	Package	.107	.163	.433	1	.510	1.113
	Constant	-.607	1.356	.200	1	.654	.545
above 45	Price	.137	.182	.569	1	.451	1.147
	promotion	-.303	.267	1.290	1	.256	.739
	product	-.035	.204	.029	1	.865	.966
	Dist	-.213	.227	.879	1	.348	.808
	Package	-.240	.214	1.261	1	.262	.787
	Constant	2.026	1.793	1.276	1	.259	7.580

Table 1.14 examines the impact of market mix on the preference of dove soap for different age group through logistic regression. It is evident from the given table that any of age segments is not affected by market mix offered for the preference of dove ( $p > 0.05$ ). May be some other factors are contributing more in making the preference for the brand dove.

Table 1.15 : Age wise analysis of market mix for Vivel soap							
Age		B	S.E.	Wald	df	Sig.	Exp(B)
18-35	Price	.110	.154	.515	1	.473	1.117
	promotion	-.176	.204	.743	1	.389	.839
	Product	.139	.181	.590	1	.442	1.149
	Dist	-.197	.177	1.239	1	.266	.821
	Package	.218	.173	1.585	1	.208	1.244
	Constant	-.767	1.422	.291	1	.589	.464
36-45	Price	.060	.139	.187	1	.665	1.062
	promotion	.014	.206	.005	1	.944	1.015
	product	.105	.159	.432	1	.511	1.110
	Dist	.008	.146	.003	1	.955	1.008
	Package	-.274	.159	2.994	1	.084	.760
	Constant	.129	1.308	.010	1	.921	1.138
above 45	Price	-.039	.178	.047	1	.828	.962
	promotion	.251	.278	.818	1	.366	1.286
	product	.076	.204	.139	1	.709	1.079
	Dist	-.088	.223	.157	1	.692	.915
	Package	-.036	.211	.030	1	.863	.964
	Constant	-1.173	1.792	.429	1	.513	.309

The results show in the table 1.15 states that the brand preferences for the brand vivel are significantly affected by any of market mix ( $p > 0.05$ ). All the age groups are found unaffected by blend of market mix for the preference of the given brand.

Age		B	S.E.	Wald	df	Sig.	Exp(B)
18-35	Price	-.241	.167	2.079	1	.149	.786
	promotion	-.495	.260	3.610	1	.057	.610
	product	.336	.185	3.285	1	.070	1.400
	Dist	-.052	.186	.079	1	.779	.949
	Package	-.068	.186	.133	1	.716	.934
	Constant	2.667	1.630	2.677	1	.102	14.398
36-45	Price	-.280	.146	3.658	1	.056	.756
	promotion	-.218	.217	1.007	1	.316	.804
	product	-.140	.166	.712	1	.399	.869
	Dist	.189	.154	1.510	1	.219	1.208
	Package	-.096	.167	.335	1	.563	.908
	Constant	2.771	1.390	3.973	1	.046	15.981
above 45	Price	.141	.189	.552	1	.458	1.151
	promotion	-.138	.298	.213	1	.644	.871
	product	.148	.216	.465	1	.495	1.159
	Dist	-.615	.235	6.862	1	.009	.541
	Package	-.273	.248	1.209	1	.271	.761
	Constant	2.778	2.008	1.913	1	.167	16.089

Table 1.16 depicts that results of regression analysis for showing the impact of market mix on the preference of the fiamma di wills soap for the different age groups. It is clearly indicates from the table that young age and adult age group is significantly affected by any of market mix for their preference for given brand ( $p > 0.05$ ). But the age group of above 45 is significantly affected by the distribution of the brand as the p value for distribution is less than 0.05.

**Income-wise Analysis of market mix affecting the brand preferences:**

Income(in lacs)		B	S.E.	Wald	df	Sig.	Exp(B)
up to 3,50,000	Price	.059	.168	.121	1	.728	1.060
	promotion	.162	.177	.840	1	.360	1.176
	product	.140	.176	.634	1	.426	1.151
	Dist	-.126	.193	.429	1	.512	.881
	Package	-.137	.191	.514	1	.473	.872
3,50,000-6,50,000	Price	-.216	.136	2.517	1	.113	.806
	promotion	-.140	.155	.822	1	.365	.869
	product	.297	.145	4.220	1	.040	1.346
	Dist	.112	.151	.551	1	.458	1.119
	Package	.207	.151	1.875	1	.171	1.230
above 6,50,000	Price	.072	.170	.177	1	.674	1.074
	promotion	-.062	.174	.127	1	.721	.940
	product	.167	.179	.869	1	.351	1.182
	Dist	-.035	.211	.028	1	.867	.965
	Package	-.098	.164	.355	1	.551	.907

Sig. at 95% level of confidence

Table 1.17 shows that the middle income group consumers are influenced by the product characteristics as the p-value for product is below 0.05. The main reason behind this is that the middle income group always tries to find the best quality product at reasonable price whereas lower and upper class have the different

requirements. The lower income group may not prefer any product as these are not covered under necessity whereas upper class purchase according to their status and psychographic requirements.

Income		B	S.E.	Wald	df	Sig.	Exp(B)
up to 3,50,000	Price	.089	.164	.296	1	.586	1.093
	promotion	-.036	.171	.043	1	.835	.965
	product	.036	.171	.045	1	.833	1.037
	Dist	-.194	.190	1.036	1	.309	.824
	Package	-.009	.182	.002	1	.961	.991
3,50,000-6,50,000	Price	.000	.122	.000	1	1.000	1.000
	promotion	-.005	.143	.001	1	.972	.995
	product	.197	.140	1.995	1	.158	1.218
	Dist	-.049	.136	.130	1	.719	.952
	Package	-.248	.142	3.038	1	.081	.780
above 6,50,000	Price	-.034	.170	.039	1	.843	.967
	promotion	-.092	.173	.282	1	.596	.912
	product	.002	.178	.000	1	.992	1.002
	Dist	-.041	.210	.038	1	.846	.960
	Package	.106	.164	.417	1	.518	1.112

Table 1.18 shows the income wise analysis of market mix for vivel soap. The table indicates that the income do not have any relation with the market mix and brand preferences. The table 1.18 discusses that vivel soap preferences do not affected by income and any of market mix. It means that vivel is not for any single income, it is basically related to the psychographics of the individuals.

Income		B	S.E.	Wald	df	Sig.	Exp(B)
up to 3,50,000	Price	-.250	.170	2.149	1	.143	.779
	promotion	-.103	.175	.347	1	.556	.902
	product	.002	.178	.000	1	.992	1.002
	Dist	.333	.194	2.928	1	.087	1.395
	Package	.020	.187	.011	1	.915	1.020
3,50,000-6,50,000	Price	.079	.122	.415	1	.519	1.082
	promotion	-.104	.140	.552	1	.457	.901
	product	-.029	.136	.045	1	.833	.972
	Dist	-.097	.137	.500	1	.479	.908
	Package	.035	.141	.061	1	.804	1.036
above 6,50,000	Price	.280	.184	2.326	1	.127	1.323
	promotion	.408	.191	4.572	1	.032	1.504
	product	-.511	.194	6.918	1	.009	.600
	Dist	-.230	.228	1.017	1	.313	.794
	Package	-.116	.172	.457	1	.499	.890

Table 1.19 discusses that dove soap is the popular brand among upper class. It means company is successfully positioned it as premium brand but in the upper class only promotion and product are significantly affecting the brand preferences of dove but in the lower and middle class no market mix is affective. The p-values of promotion and product in the upper class are lower than 0.05. Table is showing that brand is not working in the lower and middle class because the demand profile of these income groups is matched with the brand. As dove is the premium brand still some of the market mixes are ineffective even in the upper class.

Income		B	S.E.	Wald	df	Sig.	Exp(B)
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up to 3,50,000	Price	-.220	.176	1.569	1	.210	.802
	promotion	-.026	.183	.020	1	.888	.975
	product	-.255	.183	1.946	1	.163	.775
	Dist	.433	.202	4.601	1	.032	1.541
	Package	.028	.196	.021	1	.885	1.029
3,50,000-6,50,000	Price	-.086	.126	.462	1	.497	.918
	promotion	-.011	.147	.005	1	.941	.989
	product	-.169	.142	1.419	1	.233	.845
	Dist	.102	.141	.531	1	.466	1.108
	Package	-.006	.147	.002	1	.967	.994
above 6,50,000	Price	-.186	.174	1.137	1	.286	.831
	promotion	-.101	.175	.330	1	.565	.904
	product	.104	.183	.323	1	.570	1.110
	Dist	.105	.213	.242	1	.622	1.111
	Package	.006	.165	.002	1	.969	1.006

The above table 1.20 shows that lux is popular among low income group but not in other section of the society. In the low income group only distribution of the brand is affecting the preferences of the brand. It means brand is not supported by other factors of market mix. The table discussed that lux is popular because it is available at every store due to its vast distribution and the low income group customer use to buy what is available. But the brand is not hitting the middle and upper class of the society.

Table 1.21 : Income wise analysis of market mix for vivel active fair							
Income		B	S.E.	Wald	df	Sig.	Exp(B)
up to 3,50,000	Price	.135	.164	.678	1	.410	1.145
	promotion	-.079	.172	.213	1	.645	.924
	product	-.026	.172	.024	1	.878	.974
	Dist	.197	.191	1.061	1	.303	1.217
	Package	-.085	.183	.217	1	.641	.918
3,50,000-6,50,000	Price	-.043	.121	.127	1	.721	.958
	promotion	-.222	.143	2.412	1	.120	.801
	product	.088	.135	.424	1	.515	1.092
	Dist	.121	.135	.802	1	.370	1.129
	Package	.153	.140	1.190	1	.275	1.166
above 6,50,000	Price	.233	.175	1.772	1	.183	1.262
	promotion	-.104	.175	.353	1	.552	.901
	product	-.087	.180	.231	1	.631	.917
	Dist	-.181	.216	.702	1	.402	.834
	Package	.043	.166	.068	1	.794	1.044

The table 1.21 shows that vivel active fair is not affected by any of market mix. It means that the company is not properly offering the market mix because consumers are not getting the brand ideas through the market mix.

Table 1.22: Income wise analysis of market mix for Fair and lovely							
Income		B	S.E.	Wald	df	Sig.	Exp(B)
up to 3,50,000	Price	-.257	.170	2.278	1	.131	.773
	promotion	.083	.174	.227	1	.634	1.086
	product	.165	.174	.902	1	.342	1.180
	Dist	-.038	.190	.039	1	.843	.963
	Package	.088	.186	.225	1	.635	1.092
3,50,000-6,50,000	Price	-.110	.122	.821	1	.365	.896
	promotion	.116	.142	.667	1	.414	1.123

	product	.066	.137	.232	1	.630	1.068
	Dist	-.310	.138	5.008	1	.025	.734
	Package	.075	.141	.283	1	.595	1.078
above 6,50,000	Price	-.293	.177	2.751	1	.097	.746
	promotion	.052	.175	.089	1	.766	1.053
	product	.136	.181	.565	1	.452	1.145
	Dist	.230	.218	1.121	1	.290	1.259
	Package	-.040	.166	.057	1	.811	.961

The table 1.22 shows that fair and lovely preferences are affected by the distribution as these type of consumer do not search for their product and use to buy whatever available. But in other section of the society the product is not offering the right type of the market mix which is the main problems with the brand.

Income		B	S.E.	Wald	df	Sig.	Exp(B)
up to 3,50,000	Price	.121	.166	.535	1	.464	1.129
	promotion	.259	.177	2.131	1	.144	1.295
	product	.048	.174	.075	1	.784	1.049
	Dist	-.185	.191	.942	1	.332	.831
	Package	-.279	.188	2.202	1	.138	.756
3,50,000-6,50,000	Price	.145	.121	1.430	1	.232	1.156
	promotion	-.140	.142	.968	1	.325	.869
	product	.125	.137	.832	1	.362	1.133
	Dist	.099	.136	.530	1	.467	1.104
	Package	-.084	.142	.349	1	.555	.920
above 6,50,000	Price	-.048	.171	.080	1	.777	.953
	promotion	.211	.177	1.413	1	.235	1.235
	product	-.010	.180	.003	1	.956	.990
	Dist	-.058	.212	.075	1	.785	.944
	Package	-.186	.165	1.267	1	.260	.830

Table 1.23 shows that the premium brand of ITC in the segment of hair care is not supported by its market mix. Consumers are not in a state to understand the offering of the company as none of the market mix is significant affect the preference of the brand in any of the income groups.

Income		B	S.E.	Wald	df	Sig.	Exp(B)
up to 3,50,000	Price	-.128	.164	.609	1	.435	.880
	promotion	.135	.173	.604	1	.437	1.144
	product	-.078	.172	.205	1	.651	.925
	Dist	.145	.189	.588	1	.443	1.156
	Package	-.094	.182	.267	1	.605	.910
3,50,000-6,50,000	Price	-.106	.122	.761	1	.383	.899
	promotion	-.070	.141	.244	1	.621	.933
	product	-.170	.139	1.509	1	.219	.843
	Dist	-.072	.136	.276	1	.599	.931
	Package	.292	.146	3.993	1	.046	1.339
above 6,50,000	Price	-.221	.186	1.409	1	.235	.802
	promotion	-.085	.186	.209	1	.647	.918

	product	-.084	.193	.191	1	.662	.919
	Dist	.075	.230	.107	1	.743	1.078
	Package	.090	.178	.257	1	.612	1.095

Table 1.24 depicts logistic regression of market mix on brand preferences for different income groups. It is evident from the analysis that only distribution is significantly affecting the preferences for brand only in the middle income group (p-value < 0.05). But other factors of market mix are not important in any of the income group.

Results shows that the product, promotion, packaging and distribution are affecting the brand preferences of personal care product but price which is an important factor is not found significant in case of personal care product. It may be because personal care products are the products which are to be used regularly and need low investment. It is noted that the market mix is very important factor but importance of different market mixes dependent on the income class of consumers.

#### IV. CONCLUSION

It can be concluded from the above results that both of the FMCG major HUL and ITC are not properly doing the demographic segmentation as market mix provided by the companies is not affecting significantly the brand preferences for personal care product in any of variable. It means that companies are not using demographic segmentation and do not matching their brands profile with that of with consumers demand profiles. In some cases promotion, distribution, price and product are found significant for some of the section of society but complete market mix is not matched with any of the demographic section of the society. Companies should focus on one or two section of society and should provide products according to their preferences. As both demographics and market mix affects the purchase decision of consumers so that market mix should be according to the specific requirements of demographic characteristics.

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