CHAPTER - V

MOTIVATION AND PRODUCT PREFERENCE

The question of motivating consumers must be approached by analysing the needs of groups of consumers known as market segments aimed at with a view to stimulate relevant motives towards satisfying such needs by purchasing products as services. The knowledge of consumer needs is essential for designing the product and also for developing effective promotional strategies. The earlier efforts were directed towards listing and classifying the relevant motives. Several classifications like primary and selective motives, rational and emotional motives, patronage motives, conscious and dormant motives, were suggested by the workers in this field. These classifications did not prove to be useful because they were based on arm-chair philosophising. No emperical attempts were made for arriving at realistic classifications of motives. Consider, for example, an advertisement on dress material in which a man in attractive dress, standing in a particular posture, looking very gracious is shown to be surrounded by a few girls. If the persons watching this advertisement are asked to list the motives this advertise-ment is expected to depict, they may be able to list a few motives. The motives that operate at the time when the cloth is purchased are quite different from those which are

depicted in the advertisement. A more systematic attempt
was made by Maslow for classifying the motives or needs.
Maslow observed that when two or more motives are competing
for their expression, usually the more dominant motive
determines the course of action. This observation led him
to formulate his need hierarchy theory of motivation.
Subsequently many other attempts have been made to develop
more meaningful classifications of needs.

There are two important variables which determine the
consumer's choice. They are consumer needs and product
attributes. Consumers could be classified as habit-determined
group, group with rational consideration, price oriented
group, impulse group and as group in which psychological
behaviour dimensions are not yet fully established. The
habit oriented consumers are generally brand loyal; consumers
with rational considerations will always look for some
objective criteria while evaluating the product; the price
oriented consumers will give much more importance to price
while purchasing; impulse group can easily be influenced by
physical appeals. The product thus exerts its influence on
an individual's buying behaviour. Products can also be
classified in terms of the most appropriate appeal that
could be made to induce the buyers to purchase the product.
Prestige and status products, for example, appeal to the

esteem need. Thus brands suggesting high quality or success are likely to be purchased by those consumers who are high on esteem needs. Anxiety products involve ego defense and help to relieve social or personal threat. Soaps, perfumes and toothpastes may be included in this category because the appeals based on affectionate relationship with people and respectable place in the group could easily be adapted to these products. Most of the utility products could be best advertised by appealing to safety and physiological needs. These illustrations point to the fact that products are purchased because they provide satisfactory to the needs of consumers. What the product offers is more important than its features.

The consumer analysts should probe into the minds of the consumers in order to link up a particular supply with appropriate needs. While purchasing the product or while deciding to purchase the product the consumers try to understand the product in terms of its various physical or functional attributes. The product preference score can be obtained by considering the extent to which these attributes are given importance by the buyer. These scores can be related to the needs of the consumer is seeking to satisfy. Thus motivating the consumer requires a systematic approach involving the assessment of consumers' needs and analysis of the products' subjective and objective aspects.

In the present investigation the consumer needs have
been assessed by means of Edwards Personal Preference
Schedule (EPPS). The subjective and objective aspects of
the product are defined in terms of various common attributes
which are considered important by consumer's and marketing
analysts. The main objective of the present Chapter is to
know to what extent consumer preferences could be predicted
from needs the consumers are seeking to satisfy. As mentioned
in the third chapter the groups of respondents were based on
two communities, viz., Gujarati and Maharashtrians, and
sex of the respondents. First, multiple correlation coeffi-
cients will be presented for each of the four products both
communitywise and sexwise. This will be followed by the
examination of partial correlations to see the specific
groupings based on product attributes and EPPS needs.
(Table No.5.1, see page No.223).

The results in Table 5.1 indicate that among Maharash-
trians product preference in terms of reaction/sensitivity
to skin is the only functional aspect of the product that is
significantly predicted from EPPS needs. In case of Gujarati
the various product attributes significantly predicted from
EPPS needs are foam/lather (0.32), hardness of the soap (0.31),
newly introduced brand (0.31) and reaction/sensitivity to
skin (0.34). These attributes taken together could be
described as physical-functional, attitudinal and external

to the product. Thus in case of Gujarati atleast four
product attributes have been predicted from EPPS needs.
Although the correlations are not very high but they do
account for the significant proportion of the total variance.
(Tables 5.2 & 5.3). (See page No.224).

Referring to Tables 5.2 and 5.3 it is seen that none
of the motivational variables is significantly correlated
with product attributes. This shows that each of the motiva-
tional factors in the absence of other motivational factors
fails to contribute to the product preference scoes on
different attributes of a toilet soap product. Most of the
correlations are either low positive or low negative. Thus
prediction of certain attributes is possible from the
combined EPPS scores but each factor by itself ails to
correlate with any of the product attributes to a significant
extent. (Table No.5.4, See page No.226).

Referring to Table 5.4 which shows multiple correla-
tion coefficients between product preference scores and
EPPS needs for each of the two communities, it is observed
that none of the multiple R is significant in case of Maha-
rashtrians. In case of Gujarati the attribute formula/content
is significantly predicted from EPPS variables. On the whole
the results indicate that product preferences cannot be
predicted from EPPS needs. The results are surprising in
view of the fact that tooth-paste product is purchased by
considering its different attributes and yet product

preference in respect of these attributes is not predictable
from EPPS needs. It may be that the motivational measures
in terms of EPPS test are not very relevant for predicting
the product preference scores. This finding is in agreement
with number of past researches which failed to show any
significant relationship between EPPS needs and product
purchase. This lack of relationship does not, however, mean
that motivational factors do not play any part in predicting
preference scores. It may mean that if the needs are
assessed in the marketing context the relationship may be
found. Unlike Maharashtrians, Gujaratis seem to be more
concerned about formula/content of the toothpaste product.
The various correlations in Table 5.4 all positive and
slightly higher but except one they fail to reach the level
of significance.

Considering now the results of partial correlations
in Tables 5.5 and 5.6 which indicate partial correlation
coefficients between various product attributes and EPPS
needs, it is observed that in case of Maharashtrians flavour
is significantly but negatively correlated with succourance
and formula/content, is also negatively but significantly
correlated with autonomy. Other correlations are quite
low and insignificant. Even the two significant correlations
are not very high. On the whole the results of Table 5.5
indicate that the motivational factors taken singly do not

contribute to product preference (toothpaste) in terms of various attributes. So far as the results of Table 5.6 are concerned except the need for achievement all other motivational factors are significantly and positively correlated with the attribute 'habit'. The significant correlations are not very high but they range from .13 to .18. The attribute 'habit' is external to the product. It connotes more strongly the routine nature of purchasing the toothpaste product. The lack of relationship between product preference in terms of its various attributes and EPPS needs in case of Maharashtrians may be due to the inappropriateness of the DPPS as a measure of needs in a marketing context. The same could be said about Gujarati community because most of the correlations of needs with product attributes are very low.

Table No.5.7 (see page No.229) shows that the results of multiple correlation coefficients between product preference scores and EPPS needs according to community. It shows that the multiple R of .35 in case of Maharashtrians for fragrance is significant. Other correlations though positive are insignificant. In case of Gujaratis, the multiple Rs of .36 (Fragrance), .33 (naturality), and .34 (smoothness) are significant. Thus, the attribute fragrance is significantly predicted from EPPS needs in case of both the communities.

The attribute fragrance is related to the physical content of the product. The other two attributes viz., naturality and smoothness which are significantly predicted among Gujaratis are also related to the physical aspect of the product. Thus, both Gujaratis and Maharashtrians are emphasizing the physical aspect of the product face/talcum powder but more of the physical attributes are significantly predicted among Gujaratis than among Maharashtrians.

Referring to the results of Table 5.8 and 5.9 (See page No. 230) which indicate partial correlations between attributes and needs it can be seen that only two correlations are significant in case of Maharashtrians. The correlation of "endurance" with "Attractive container" is significant (-.14) but it is negative. The correlation between "imparts freshness" and "achievement" is also significant but it is positive. Both correlations are not very high. All other correlations are very low and insignificant. On the whole It could be said that the various EPPS needs taken separately fail to correlate substantially with different product attributes in case of Maharashtrians. I_n case of Gujaratis none of the partial correlations is significant. This again may be due to the fact that the EPPS needs are not relevant in a marketing context.

Table 5.10 (See page No. 232) shows multiple correlation coefficients separately for the two communities in case of "the product dress material/cloth. So far as Maharashtrian group is concerned the multiple R^S of 0.35 (Sober/ light colour) and 0.36 (Sober/design/plain) are significant. The variance accounted for in terms of EPPS needs in the two dependent variables (product attributes) is quite considerable. These two attributes that are significantly predicted refer to the physical aspect of the product. In case of Gujaratis the attributes 'dark colour' (0.32), different types for different weather conditions (0.36), feel of the cloth, i.e. texture (0.33), latest/new type of material (0.38) and others opinion (0.31) are significantly predicted from EPPS needs. These attributes refer to physical, functional and attitudinal aspects of the product. Dark colour and feel of the cloth (texture) are purely physical attributes; different types for different weather conditions is a functional type of attribute and latest/ new type material as well as others' opinion refer to the attitudinal aspect of the product. So far as the economic aspect (price) of the product is concerned the multiple 'R' is higher (0.30) in case of Maharashtrians than in case of Gujaratis (0.25). The multiple R^S for attributes different types for different weather conditions (0.32)

feel of cloth (0.31) and price (.30) though insignificant
are very close to the significant value among Maharashtrians.
In terms of the actual results in Table 5.10 more attributes
are significantly predicted among Gujaratis than among
Maharashtrians.

Referring to Table 5.11 it is ob served that none of
partial correlations is significant among Maharashtrians
(see page no.233). The correlations are very low. In case
of Gujaratis (Table No. 5.12, see page No.234) except the
partial correlations of "different types of different
weather conditions", with deference, exhibition and dominance
all other correlations are low and insignificant. Even the
significant correlations are also not very high. Thus on
the whole, it could be seen that EPPS needs taken singly
do not correlate with the product attributes.

In general the differences between the two communi-
ties are not consistent for all the four product groups.
On the whole more attributes are significantly predicted
among Gujaratis than among Maharashtrians. Most of the
partial correlations for both the communities fail to reach
the level of significance. As already indicated this lack
of relationship may be due to the fact that the EPPS needs
are not relevant in a marketing context. The results in

terms of multiple R^S indicate that EPPS needs taken together do account for variance to a certain extent but the proportion of variance accounted for in this manner is not very high.

Sex Difference in Consumer Product Preferences :

In this section male and female respondents have been compared with respect to the results of multiple correlation coefficients and partial correlation coefficients separately for each of the four products. Table 5.13 (see page No.235) shows the results of multiple correlation coefficients in case of Toilet soap.

Referring to Table 5.13 it is observed that none of the multiple R^S is significant in case of males. In case of feamles the multiple R of .36 and of .35 for the attributes germicidal/medicinal and reaction/Sensitivity respectively are significant. In case of males the correlation coefficients are lower than those in case of females. It should be noted here that germicidal/medicinal is a physical attribute while reaction/sensitivity to skin is a functional attribute. Among males the lowest correlation coefficient was for price (0.17) and among females the lowest correlation coefficient was 0.27 for imparts freshness and lasts longer attributes. Thus motivational factors fail to predict any of the

attribute scoes in case of males whereas in case of females at least two - one physical and the other functional - attributes are significantly predicted. In view of slightly higher correlations though its insignificant among females in comparison to those in males, it could be said that preference scores could be better predicted in the former than in the later group. It should be noted here that the attributes foam/lather, hardness of soap, lasts longer and price connote the economic aspect of the product. The multiple R^S for these attributes are slightly higher among females than among males.

So far as the results in Table 5.14 are concerned hardness of the soap correlated negatively but significantly with achievement (-.14), affiliation (-.14), intraception (-.13), abasement (-.13), and aggression (-.13). All other correlations are quite low and insignificant. Even the significant correlations are not very high. In case of females (Table 5.15, see page No.237) product preference score based on others' opinion is correlated positively and significantly with achievement (.17), deference (.15), order (.15), exhibition (.14), Succourance (.14), dominance (.13), abasement (.16), nurturance (.16), heterosexuality (.18), and aggression (.15). Newly introduced brand to negatively but significantly correlated with autonomy. All

other correlations are low and insignificant. Thus others'
opinion is strongly relied upon by those female respondents
who score relatively high on the above mentioned needs with
which it is positively and significantly correlated. The
attribute others' opinion is attitudinal in nature.

Referring to the results of Table 5.16 (see page No.238)
which shows multiple correlation coefficients between EPPS
needs and preference of toothpaste product it can be seen
that among males feel fresh (0.33) and newly introduced
brand (0.33) are significantly predicted from EPPS needs.
In case of female subjects none of the multiple Rs is
significant.

The multiple Rs of formula/content, germicidal/
medicinal, and habit though insignificant are slightly
higher among female subjects than among male subjects. Of
the two attributes which are significantly predicted among
males one is functional and the other is attitudinal. All
the physical attributes like flavour, formula/content,
germicidal/medicinal, and taste had low correlations in
males as compared to females.

The results in Table 5.17 (see page No.239) show that
the attribute foam/lather of the toothpaste product correlates
positively and significantly with achievement (0.13), order

(0.15), exhibition (0.16), autonomy (0.14), nurturance
(0.13), change (0.13) and endurance (0.13). All other
correlations are quite low and insignificant. In case of
female subjects formula/content correlates negatively and
significantly with affiliation (-0.13), Succorance (-0.14),
and heterosexuality (-0.14). Habit correlates positively and
significantly with affiliation (0.15) and deference (0.14) .
The attribute others' opinion is also positively and
significantly correlated with deference. Thus females
scoring low on affiliation, succorance, and heterosexuality
tend to purchase the toothpaste product by considering its
formula/content. Also for female subjects high on deference
and affiliation product purchase is relatively a habitual
matter. Female subjects high on deference also seem to rely
upon others' opinion while purchasing toothpaste.

The results of Table 5.19 (see page No.241) indicate
that in case of males the multiple R of .31 is significant
for naturality and in case of females the multiple 'R' of
.36 is significant for habit. The multiple Rs for attractive
container, fragrance and imparts freshness are slightly higher
among females than among males. Most of the physical and
functional attributes and also attitudinal attributes are
not significantly predicted from EPPS needs for both male
and female subjects.

Referring to Table No.20 & 21 (See page No.242/243) it is observed that among males imparts freshness is positively and significantly correlated with all the EPPS needs. The multiple R for this attribute was not significant. Thus the expected score based on all the EPPS needs fail to correlate significantly with the actual score on "imparts freshness" but the score on each need taken singly correlates to a significant extent with the score on "imparts freshness". All other correlations are low and insignificant. In case of females none of the partial correlations is significant. Thus the EPPS needs fail to contribute to purchase based on any of the ten attributes of the face/talcum powder.

The results of Table 5.22 (see page No.244) show that the multiple R of .31 for sober/light colour is barely significant in case of males. In case of females the multiple Rs of .37 and of .35 for 'different types for different weather conditions' and dark colour are significant respectively. It can also be observed from Table 22 that the multiple Rs for feel of the cloth, latest/new type of material, price, and type of fabric are slightly higher among female subjects than among male subjects. In case of males except the correlation of .30 for others' opinion all other correlations are low.

Referring to Table 5.23 (see page No.245), it is observed that others' opinion is negatively and significantly correlated with autonomy and nurturance. All other correlations are very low and insignificant. In case of female subjects none of the partial correlations is significant.

Considering the overall results of multiple correlations for the two communities it could be said that the attributes referring to the physical and attitudinal aspects of the product are better predicted from EPPS needs among Gujarati than among Maharastrians. The number of attributes predicted from EPPS needs is much less among Maharashtrians than among Gujarati. The predicted values of correlations rarely exceed .40. This indicates that the variance accounted for in terms of EPPS needs is not very substantial. The overall predictability is not very satisfactory. This overall low predictability may be due to the fact that needs as they are measured by means of EPPS are not very relevant in a marketing context. If needs are defined sufficiently broadly in relation to marketing activities they might predict consumer preferences to a considerable extent. So far as the results of partial correlation are concerned none of the partial correlations

between product attributes of toilet soap as well as
dress materials and EPPS needs is significant among Maha-
rashtrians. In case of Gujarati none of the partial
correlations is significant for toilet soap. For the
tooth paste product the correlations of autonomy with
formula/content and of succorance with flavour are low
negative and significant among Maharashtrians. In the same
community the correlation of endurance with attractive
container is low negative and significant and the correla-
tion of achievement with imparts freshness is low positive
and significant for face/talcum powder.

These attributes are physical and functional in nature.
In case of Gujarati habit attribute of tooth paste correlated
positively and significantly with all except one needs.
Also imparts freshness attribute of face/talcum powder is
positively and significantly correlated with deference and
change. All other correlations are very low and insignifi-
cant. On the whole the EPPS needs taken separately do not
contribute to the product preference of both Maharashtrians
and Gujaratis.

In case of male Hardness of soap correlates negatively
and significantly with achievement, affiliation, intra-
ception, abasement and aggression; Foam/lather of toothpaste
correlates positively and significantly with achievement,

order, exhibition, autonomy, nurturance, change and endurance; imparts freshness of face/talcum powder correlates positively and significantly with all except one needs. Others' opinion in case of dress material correlates negatively with autonomy and nurturance. These correlations though significant are not very high. In case of female others' opinion attribute of toilet soap correlates positively and significantly with eleven of the fifteen needs; while newly introduced brand correlates negatively with autonomy only. The attribute formula/content of the toothpaste product correlated negatively and significantly with affiliation, succourance, and heterosexuality; habit correlates positively with deference and affiliation; Others opinion correlates positively with deferance. None of the partial correlations are significant in case of face/talcum powder and dress material. Here also the significant correlations are not very high. Thus on the whole EPPS needs fail to contribute to the product preference of both Male and Female subjects.

TABLE NO. 5·1

PRODUCT GROUP-I - TOILET SOAP

Multiple Correlation Coefficient between EPPS Needs and Product Preference Scores According to Community:

Attributes	Product Preference	
	MH	GU
1. Foam/Lather	0.29	0.32*
2. Imparts freshness	0.21	0.19
3. Germicidal/Medicinal	0.29	0.28
4. Habit	0.21	0.23
5. Hardness of the Soap	0.26	0.31
6. Lasts longer	0.23	0.27
7. Newly introduced brand	0.29	0.31
8. Others' opinion	0.28	0.27
9. Price	0.19	0.26
10. Reaction/Sensitivity to skin	0.40**	0.34**

Significant Level 0.01**
                 0.05*

MH = Maharashtrians

GU = Gujarati.

TABLE NO. S.2

PRODUCT GROUP -I - TOILET SOAP

Partial Correlation Coefficients Between Attributes and EPPS Needs Amongs

MAHARASHTRIANS

EPPS	Foam/ Lather	Imparts Fresh- ness	Germi- cidal/ Medi- cinal	Habit	Hard- ness of the Soap	Lasts Long- er	Newly Intro- duced Brand	Others' Opinion	Price	Reaction/ Sensi- tivity to Skin
Achievement	-08	-01	-05	-10	-01	.01	-01	.01	-02	.03
Deference	-02	-02	01	-08	-01	.02	04	02	-04	-01
Order	-02	-03	-01	-10	-11	-04	03	02	-02	-06
Exhibition	-03	-05	-01	-10	-08	04	06	04	-01	-04
Autonomy	-05	-05	-07	-00	-10	00	06	02	-03	-05
Affiliation	-00	-03	-02	-11	-12	-02	04	05	-07	-07
Intraception	-03	-06	-05	-11	-10	-01	01	-00	-05	-03
Succourance	-04	-04	-02	-07	-09	04	08	05	-04	03
Dominance	-09	-04	-03	-11	-04	05	03	03	-02	00
Abasement	-07	-03	-05	-07	-08	04	06	06	-03	+04
Nurturance	-07	-02	-03	-10	-05	06	01	-05	-01	-02
Change	-07	-01	-07	-11	-09	00	-00	-04	-03	-03
Endurance	-06	01	-02	-12	-09	01	02	04	-03	02
Heterosexuality	-03	-03	-04	-11	-12	02	05	02	-05	-05
Aggression	-04	-01	-03	-11	-11	01	03	01	-03	-11

Significant Level 0.01**
0.05*

TABLE NO. 5.3

PRODUCT GROUP -I - TOILET SOAP

Partial Correlation Coefficients Between Attributes and EPPS Needs Among

GUJARATI

EPPS	Foam Lather	Imparts Freshness	Germicidal/Medicinal	Habit	Hardness of the Soap	Last Longer	Newly Introduced Brand	Others' Opinion	Price	Reaction/Sensitivity to Skin
Achievement	-07	02	-07	03	03	-01	-06	05	-05	-02
Deference	-04	06	-01	07	-02	04	-04	08	-03	-05
Order	00	02	-02	05	05	06	-01	06	-02	03
Exhibition	-00	04	-02	05	04	04	-04	06	-01	07
Autonomy	-04	04	-04	03	03	-01	-06	03	-05	03
Affiliation	00	04	01	03	03	03	-06	04	-05	-01
Intraception	-05	01	-01	05	02	05	-05	05	-05	05
Sccourance	-04	01	-05	04	05	01	-03	08	-04	-01
Dominance	-02	03	00	03	06	02	-03	04	-02	03
Abasement	-05	03	-01	08	02	01	01	07	-05	03
Nurturance	-07	03	-02	04	01	02	-06	04	-05	04
Change	-04	05	-04	04	06	03	-01	03	-07	-01
Endurance	-03	03	-02	04	03	04	+04	03	-04	00
Heterosexuality	-05	03	-03	05	05	03	-02	07	-03	01
Aggression	-04	03	-02	04	03	04	-03	07	-04	03

Significant Level 0.01**
0.05*

TABLE No. 5·4

Multiple Correlation Coefficient Between EPPS Needs
and Product Preference Scores According to Community.

PRODUCT GROUP - II TOOTH PASTE

Attributes	Product Preference	
	MH	GU
1. Feel fresh	0.30	0.30
2. Flavour	0.29	0.28
3. Foam/lather	0.25	0.30
4. Formula/Content	0.30	0.33*
5. Germicidal/Medicinal	0.34	0.23
6. Habit	0.33	0.27
7. Newly introduced brand	0.29	0.28
8. Others' Opinion	0.28	0.20
9. Price	0.26	0.23
10. Taste	0.24	0.29

Significant Level 0.01 **

0.05 *

MH = Maharashtrians
GU = Gujarati

TABLE NO. 5.6

PRODUCT GROUP - II - TOOTH PASTE

Partial Correlation Coefficients Between Attributes and EPPS Needs among

MAHARASHTRIAN

EPPS	Feel Fresh	Flavour	Foam/Lather	Formula/Content	Germicidal/Medicinal	Habit	Newly Introduced Brand	Others' Opinion	Price	Taste
Achievement	-07	-03	06	-09	01	-05	-03	02	-00	02
Deference	-08	-06	05	-05	07	02	04	04	01	-03
Order	-05	-08	08	-07	02	-01	-01	01	05	-01
Exhibition	-02	-06	07	-09	04	01	06	06	01	-01
Autonomy	-04	-04	05	-16	-02	-03	04	02	00	-02
Affiliation	-07	-06	06	-12	-02	-03	01	07	-04	-02
Intraception	-07	-08	07	-09	-01	02	03	03	-04	04
Succourance	-09	-13	03	-09	-04	02	06	06	-01	-03
Dominance	-10	-12	-00	-13	-00	-07	-01	01	01	02
Abasement	-07	-07	01	-11	-01	-05	05	07	02	-02
Nurturance	-05	-06	07	-07	04	02	01	02	06	03
Change	-09	-10	02	-10	-00	-06	00	01	00	-02
Endurance	-01	-06	05	-11	03	-03	00	03	-02	00
Heterosexuality	-06	-07	06	-09	00	-05	03	02	01	00
Aggression	-06	-08	07	-10	01	-01	03	05	03	-00

Significant Level 0.01**
                       0.05*

TABLE NO. 55

PRODUCT GROUP - II - TOOTH PASTE

Partial Correlation Coefficients Between Attributes and EPPS Needs among

GUJARATI

EPPS	Feel Fresh	Flavour	Foam/Lather	Formula/Content	Germi-cidal/Medici-nal	Habit	Newly Intro-duced Brand	Others' Opinion	Price	Taste
Achievement	03	-03	-02	-03	03	12	01	03	-06	03
Deference	10	03	00	-00	06	18	03	06	-03	07
Order	11	-00	02	01	09	13	05	03	-02	05
Exhibition	10	04	05	-00	07	16	03	02	-01	07
Autonomy	07	-01	01	-03	07	16	-00	02	-05	05
Affiliation	08	02	02	-03	06	17	01	00	-04	06
Intraception	06	-01	-00	-01	07	14	01	02	-04	07
Succourance	06	-01	-04	-06	03	14	03	03	-05	04
Dominance	09	-02	01	02	08	14	01	02	-03	05
Abasement	07	-03	-01	-02	06	15	05	05	-06	01
Nurturance	07	-00	-01	-03	07	15	-02	00	-06	08
Change	09	-01	02	-01	05	13	03	02	-05	07
Endurance	07	01	02	01	06	17	-00	00	-03	03
Heterosexuality	07	-01	-01	-03	05	14	02	03	-03	03
Aggression	09	02	-01	-02	04	14	03	02	-04	05

Significant level 0.01**
0.05*

TABLE NO. 5·3

PRODUCT GROUP -III - FACE/TALCUM POWDER

Multiple Correlation Coefficient Between EPPS Needs
and Product Preference Scores According to Community

Attributes	Product Preference	
	MH	GU
1. Attractive Container	0.25	0.28
2. Display of brands	0.17	0.23
3. Fragrance	0.35*	0.36**
4. Imparts freshness/refreshing	0.33	0.30
5. Habit	0.30	0.25
6. Naturality	0.32	0.33*
7. Newly introduced brand	0.19	0.29
8. Others' opinion	0.30	0.29
9. Price	0.23	0.24
10. Smoothness	0.25	0.34**

Significant Level 0.01 **

0.05 *

MH = Maharashtrians
GU = Gujarati

TABLE NO. 58

PRODUCT GROUP - III FACE/TALCUM POWDER

Partial Correlation Coefficient Between Attributes and FPPS Needs among

MAHARASHTRIAN

EPPS	Attractive container	Display of Brands	Fragrance	Imparts Freshness/Refreshing	Habit	Naturality	Newly introduced Brand	Others' Opinion	Price	Smoothness
Achievement	-11	-01	05	13*	-04	03	-03	01	-04	-05
Deference	-12	-01	-03	08	02	06	-01	-01	-06	-05
Order	-10	03	08	11	-01	01	-04	05	00	-03
Exhibition	-12	02	05	09	-03	03	01	08	-03	-02
Autonomy	-09	02	05	09	-06	00	-02	01	-04	-07
Affiliation	-10	01	-00	06	-03	03	01	05	-08	-10
Intraception	-12	01	02	05	-03	01	-02	03	-07	-06
Succourance	-08	02	-02	05	-02	03	02	05	-04	-05
Dominance	-09	04	01	07	-06	-01	-03	05	-01	-07
Abasement	-08	00	01	08	-04	03	01	08	-05	-04
Nurturance	-12	02	10	09	-01	05	-02	-01	01	-04
Change	-10	00	03	12	-04	01	-03	-02	-04	-06
Endurance	-14*	-01	01	11	-05	06	-00	02	-07	-03
Heterosexuality	-08	01	04	06	-07	-00	00	04	-05	-05
Aggression	-10	00	04	08	-05	-00	-01	03	-04	-05

Significant Level 0.01**
0.05*

TABLE NO. 52

PRODUCT GROUP – III – FACE/TALCUM POWDER

Partial Correlation Coefficient Between Attributes and EPPS Needs among

GUJARATI

EPPS	Attractive Container	Display of Brands	Fragrance	Imparts Freshness/ Refreshing	Habit	Naturality	Newly introduced Brand	Others' Opinion	Price	Smoothness
Achievement	-03	05	00	07	-01	-03	-06	01	-03	-02
Deference	00	08	06	13*	05	02	-04	03	-04	07
Order	-00	05	06	12	-01	01	-03	02	+01	01
Exhibition	02	08	09	10	03	02	-03	-01	-01	03
Autonomy	-03	04	05	12	-01	-00	-09	-03	-05	-01
Affiliation	03	07	03	08	02	-02	-03	-02	-03	02
Intraception	-03	02	03	09	01	-00	-06	-01	-05	-02
Succourance	02	05	02	06	01	-04	-04	03	-04	-04
Dominance	02	06	07	11	-01	01	-05	01	-02	02
Abasement	-01	07	04	08	01	-03	-03	01	-06	01
Nurturance	-02	04	05	12	-02	-00	-08	-03	-04	03
Change	-02	04	09	13*	-00	02	-03	00	-04	00
Endurance	01	06	03	09	02	-01	-05	-04	-03	01
Heterosexuality	-02	06	04	09	-00	-03	-05	01	-03	-00
Aggression	00	07	-00	08	00	-04	-03	-00	-04	04

Significant Level   0.01**
0.05*

TABLE NO. 5·10

PRODUCT GROUP -IV - DRESS MATERIAL/CLOTH

Multiple Correlation Coefficient Between EPPS Needs
and Product Preference Scores According to Community.

A t t r i b u t e s	Product Preference	
	MH	GU
1. Dark colour	0.29	0.32
2. Different types for different weather conditions	0.32	0.36**
3. Feel heavy while wearing	0.24	0.25
4. Feel of the cloth	0.31	0.33*
5. Latest/new type of material	0.27	0.38**
6. Others' opinion	0.22	0.31*
7. Price	0.30	0.25
8. Sober/light colour	0.35*	0.29
9. Sober design/plain	0.36*	0.19
10. Type of fabric	0.28	0.29

Significant Level 0.01 **

0.05 *

MH = Maharashtrians

GU = Gujarati

TABLE NO. S14

PRODUCT GROUP - IV - DRESS MATERIAL/CLOTH

Partial Correlation Coefficient Between Attributes and EPPS Needs among

MAHARASHTRIAN

EPPS	Dark Colour	Diff. Types for Diff. Whether Conditions	Feel Heavy While Wearing	Feel of the Cloth	Latest/New Type of Material	Others' Opinion	Price	Sober/Light Colour	Sober Design/Plain	Type of Fabric.
Achievement	-01	-07	-06	-01	02	-03	08	11	-01	01
Deference	-01	-05	-08	-06	-01	-06	05	07	-02	-02
Order	01	-01	-02	-05	05	-08	10	12	04	03
Exhibition	05	-07	-04	-05	05	-04	03	05	-05	01
Autonomy	05	-09	-03	-06	03	-05	06	05	02	-02
Affiliation	05	-13	-08	-10	01	-01	04	06	-03	-03
Intraception	02	-09	-03	-06	03	-02	00	05	-02	-02
Succourance	02	-08	02	-10	-00	-04	01	06	-01	-03
Dominance	-03	-09	-03	-09	01	-05	06	06	-01	-08
Abasement	02	-12	-03	-07	05	-03	05	12	00	-03
Nurturance	04	-07	-07	-03	05	-09	08	06	-01	-01
Change	02	-10	-04	-08	06	-07	09	10	-04	-02
Endurance	03	-06	-05	-11	02	-03	03	10	03	-03
Heterosexuality	04	-12	-03	-07	06	-03	04	07	-03	-03
Aggression	03	-12	-05	-09	02	-06	04	07	-05	-04

TABLE NO. 5.19

PRODUCT GROUP - IV - DRESS MATERIAL/CLOTH

Partial Correlation Coefficient Between Attributes and EPPS Needs among

GUJARATI

EPPS	Dark Colour	Diff. Types for Diff. Whether Conditions.	Feel Heavy While Wearing	Feel of the Cloth	Latest/New Type of Material	Others' Opinion	Price	Sober/Light Colour	Sober Design/Plain	Type of Fabric
Achievement	10	10	05	-03	00	-02	00	.06	-07	-04
Deference	06	15*	06	02	03	02	00	02	-02	-02
Order	11	12	06	-02	05	00	-00	-01	-04	-02
Exhibition	11	14*	08	-02	04	02	02	-02	-04	-06
Autonomy	10	09	02	01	01	-02	00	-05	-07	-01
Affiliation	12	09	06	-01	08	01	01	-04	-05	-03
Intraception	09	07	02	-02	00	-02	-01	-06	-06	-04
Succourance	11	06	04	-06	03	04	-02	-04	-07	-05
Dominance	10	13*	05	-02	05	02	01	-04	-05	00
Abasement	06	12	07	-00	01	04	-04	-03	-05	-03
Nurturance	11	09	05	-01	04	-03	-02	-03	-05	-03
Change	09	10	04	01	07	-01	-01	-02	-05	02
Endurance	10	09	02	-04	02	-02	01	-04	-04	-02
Heterosexuality	09	08	06	-05	01	02	-01	-04	-06	-04
Aggression	07	10	07	-02	05	-01	-01	-03	-05	-02

Significant Level   0.01 **
0.05 *

TABLE NO. 5·13

PRODUCT GROUP - I - TOILET SOAP

Multiple Correlation Coefficient Between EPPS Needs and Product Preference Scores According to Sex.

A t t r i b u t e s	Product Preference	
	Male	Female
1. Foam/Lather	0.29	0.32
2. Imparts freshness	0.18	0.27
3. Germicidal/Medicinal	0.30	0.36*
4. Habit	0.18	0.33
5. Hardness of the Soap	0.25	0.29
6. Lasts longer	0.26	0.27
7. Newly introduced brand	0.28	0.33
8. Others' Opinion	0.28	0.31
9. Price	0.17	0.32
10. Reaction/Sensitivity to skin	0.21	0.35*

Significant Level 0.01**
                   0.05*

MH = Maharashtrians
GU = Gujarati

TABLE NO. 5.14

Partial Correlation Coefficients Between Attributes and EPPS Needs Among

MALE

EPPS	Foam Lather	Imparts Fresh-Ness	Germi-cidal/Medici-nal	Habit	Hard-ness of the Soap	Lasts Long-er	Newly Intro-duced Brand	Others' Opinion	Price	Reaction/Sensiti-vity to Skin
Achievement	-07	03	-03	-04	-14	07	01	-07	-02	-04
Deference	-05	02	03	-02	-11	08	05	-05	-02	-00
Order	-01	01	03	-02	-12	11	08	-04	-02	-02
Exhibition	-02	-00	03	-03	-11	12	07	-04	-01	01
Autonomy	-04	01	-02	-04	-12	05	08	-06	-03	-02
Affiliation	00	02	04	-05	-14	06	06	-03	-04	-03
Intraception	-04	-01	01	-04	-13	10	03	-04	-05	-01
Succourance	-04	-00	-00	-02	-11	07	07	-01	-02	01
Dominance	-05	-01	03	-05	-07	10	07	-05	-02	01
Abasement	-06	01	01	-01	-13	09	08	-02	-04	-02
Nurturance	-08	01	05	-05	-11	10	02	-09	-02	02
Change	-06	02	-01	-02	-10	10	04	-08	-03	-03
Endurance	-05	03	-02	-05	-12	08	06	-05	-03	00
Heterosexuality	-06	01	02	-04	-12	08	06	-03	-03	-01
Aggression	-05	-00	00	-05	-13	09	06	-03	-01	-02

Significant Level 0.01**
0.05*

TABLE NO. 5'15

PRODUCT GROUP - I - TOILET SOAP

Partial Correlation Coefficients Between Attributes and EPPS Needs Among

FEMALE

EPPS	Foam/Lather	Imparts Freshness	Germi-cidal/Medici-nal	Habit	Hard-ness of the Soap	Lasts Long-er	Newly Intro-duced Brand	Others' Opinion	Price	Reaction/Sensi-tivity to Skin
Achievement	-11	-03	-10	-01	10	-04	-11	17*	-04	07
Deference	-04	-03	-03	04	02	03	-10	15*	-03	08
Order	-01	-02	-06	-02	09	02	-11	15*	-02	03
Exhibition	-02	-02	-06	-01	08	-03	-11	14*	01	08
Autonomy	-07	-02	-08	00	08	-00	-16	12	-04	06
Affiliation	-03	-02	-03	-03	08	-01	-12	11	-08	-01
Intraception	-07	-03	-04	00	08	01	-13	11	-04	09
Succourance	-05	-03	-04	-01	10	01	-06	14*	-05	02
Dominance	-08	-02	-04	-03	12	-02	-12	13*	-00	05
Abasement	-07	-02	-04	04	08	-03	-05	16	-03	05
Nurturance	-09	00	-11	02	07	-01	-13	16	-03	07
Change	-06	01	-06	-05	09	-02	-08	10	-08	-02
Endurance	-04	-00	-04	00	10	02	-12	12	-02	06
Heterosexuality	-03	01	-11	06	12	03	-09	18*	-01	04
Aggression	-04	05	-02	01	06	00	-09	15*	-06	03

Significant Level   0.01**
                    0.05*

TABLE NO. 5·16

PRODUCT GROUP -II - TOOTH PASTE

Multiple Correlation Coefficient Between EPPS Needs
and Product Preference Scores According to Sex.

Attributes	Product Preference	
	Male	Female
1. Feel fresh	0.33*	0.20
2. Flavour	0.25	0.26
3. Foam/Lather	0.30	0.26
4. Formula/Content	0.24	0.34
5. Germicidal/Medicinal	0.25	0.33
6. Habit	0.24	0.33
7. Newly introduced brand	0.33*	0.27
8. Others' opinion	0.26	0.25
9. Price	0.21	0.26
10. Taste	0.26	0.27

Significant Level   0.01**

0.05*

MH = Maharashtrians

GU = Gujarati.

TABLE NO. 5.18

PRODUCT GROUP - II - TOOTH PASTE

Partial Correlation Coefficient Between Attributes and FPPS Needs among

FEMALE

EPPS	Feel Fresh	Flavour	Foam/ Lather	Formula/ Content	Germi- cidal/ Medi- cinal	Habit	Newly Intro- duced Brand	Others' Opinion	Price	Taste
Achievement	-07	-11	-10	-11	02	09	-04	10	-02	04
Deference	-02	-05	-04	-08	05	14*	-06	13*	01	06
Order	-03	-10	-07	-08	07	08	-04	08	01	06
Exhibition	-01	-06	-04	-12	05	11	-06	11	05	02
Autonomy	-04	-10	-08	-10	05	11	-07	12	-01	04
Affiliation	-03	-05	02	-13*	05	15*	-04	07	-01	04
Intraception	-06	-11	-07	-11	07	11	-07	07	01	07
Succourance	-03	-12	-10	-14*	00	07	-01	09	-02	05
Dominance	-04	-12	-09	-08	07	09	-06	09	-01	08
Abasement	-02	-10	-07	-10	06	12	-00	11	-01	-01
Nurturance	-08	-09	-10	-11	04	11	-08	11	-02	04
Change	-05	-11	-07	-10	05	04	-04	07	-04	07
Endurance	-04	-10	-06	-09	04	12	-10	07	01	03
Heterosexuality	-04	-07	-09	-14*	-01	11	-05	11	01	05
Aggression	-04	-06	-07	-12	04	11	-05	08	-03	05

Significant Level 0.01 **
0.05 *

TABLE NO. 5.19

PRODUCT GROUP - III - FACE/TALCUM POWDER

Multiple Correlation Coefficient Between EPPS Needs
and Product Preference Scores According to Sex.

Attributes	Product Preference	
	Male	Female
1. Attractive Container	0.22	0.30
2. Display of brands	0.21	0.25
3. Fragrance	0.28	0.31
4. Imparts freshness/refreshing	0.29	0.31
5. Habit	0.22	0.36*
6. Naturality	0.31*	0.34
7. Newly introduced brand	0.28	0.21
8. Others' opinion	0.23	0.29
9. Price	0.24	0.28
10. Smoothness	0.26	0.28

Significant Level   0.01**
                    0.05*

MH = Maharashtrians
GU = Gujarati

TABLE NO. 5.20

PRODUCT GROUP - III - FACE/TALCUM POWDER

Partial Correlation Coefficient Between Attributes and EPPS Needs among

MALE

EPPS	Attractive Container	Display of Brands	Fragrance	Imparts Freshness/Refreshing	Habit	Naturality	Newly Introduced Brand	Others' Opinion	Price	Smoothness
Achievement	-06	-03	08	18**	00	10	-08	-03	-06	-01
Deference	-05	00	04	17**	05	10	-05	-02	-06	04
Order	-04	-00	10	17**	03	09	-06	-01	-03	-01
Exhibition	-03	02	08	16*	02	11	-03	-03	-05	04
Autonomy	-03	02	09	16*	02	10	-08	-06	-05	-02
Affiliation	-02	01	05	13*	02	09	-05	-01	-06	-01
Intraception	-06	-02	05	13*	01	09	-07	-02	-08	-00
Succourance	-01	-01	04	13*	04	09	-03	-01	-06	-01
Dominance	-03	01	07	15*	00	10	-07	-02	-04	-01
Abasement	-04	01	05	14*	01	09	-04	-01	-08	01
Nurturance	-07	-02	09	18***	04	11	-10	-06	-04	03
Change	-05	01	10	19***	03	10	-06	-04	-05	01
Endurance	-03	-00	07	18***	03	13*	-05	-05	-06	03
Heterosexuality	-05	-02	08	16*	02	08	-07	-03	-06	00
Aggression	-03	01	05	15*	-00	05	-05	-02	-04	02

Significant Level   0.01**
                    0.05*

TABLE NO. S-21

PRODUCT GROUP - III - FACE/TALCUM POWDER

Partial Correlation Coefficient Between Attributes and EPPS Needs among

FEMALE

	Attractive Container	Display of Brand	Fragrance	Imparts Freshness/ Refreshing	Habit	Naturality	Newly Introduced Brand	Others' Opinion	Price	Smoothness
Achievement	-09	09	-04	05	-00	-09	00	07	01	-05
Deference	-08	07	-01	07	09	02	-00	08	-02	-01
Order	-04	01	00	09	-02	-04	-01	09	03	-01
Exhibition	-08	08	05	05	05	-02	-02	08	03	-05
Autonomy	-11	05	-01	08	-02	-07	-05	04	-03	-07
Affiliation	-09	08	-02	03	05	-07	02	02	-03	-06
Intraception	-12	05	-03	03	04	-06	-02	05	00	-08
Succourance	-06	05	-03	-01	-01	-09	-01	09	-01	-08
Dominance	-05	09	-02	06	01	-07	-02	08	03	-04
Abasement	-08	09	00	04	02	-07	-00	09	-01	-03
Nurturance	-06	08	02	07	-03	-04	-02	07	-01	-03
Change	-09	05	04	08	-03	-03	01	06	-02	-02
Endurance	-11	07	-04	04	01	-08	-02	03	00	-06
Heterosexuality	-05	12	-01	05	02	-08	01	10	03	-07
Aggression	-07	07	-03	06	04	-03	00	04	-03	-03

Significant Level 0.01 **
0.05 *

TABLE NO. 5·22

PRODUCT GROUP -IV - DRESS MATERIAL/CLOTH

Multiple Correlation Coefficient Between EPPS Needs
and Product Preference Scores According to Sex.

Attributes	Product Preference	
	Male	Female
1. Dark colour	0.25	0.35*
2. Different types for different weather conditions.	0.29	0.37*
3. Feel heavy while wearing	0.20	0.29
4. Feel of the cloth	0.24	0.30
5. Latest/New type of material	0.23	0.33
6. Others' Opinion	0.30	0.30
7. Price	0.23	0.32
8. Sober/Light colour	0.31*	0.28
9. Sober design/plain	0.23	0.25
10. Type of fabric	0.19	0.30

Significant Level   0.01 **
                    0.05 *

MH = Maharashtrians

GU = Gujarati.

TABLE NO. 5.23

PRODUCT GROUP - IV - DRESS MATERIAL/CLOTH

Partial Correlation Coefficient Between Attributes and EPPS Needs among

MALE

EPPS	Dark Colour	Diff. Types for Diff. Whether Conditions.	Feel Heavy While Wearing	Feel of the Cloth	Latest/New Type of Material	Others' Opinion	Price	Sober/Light Colour	Sober/Design Plain	Type of Fabric
Achievement	03	07	-01	-01	-06	-10	01	08	-02	-01
Deference	01	10	00	-02	-03	-08	01	07	-01	-02
Order	03	09	03	-02	-01	-11	03	09	-01	-01
Exhibition	05	10	02	04	00	08	-01	06	-04	-00
Autonomy	07	07	01	-02	-06	-13*	01	03	-02	-00
Affiliation	06	05	-00	-05	-03	-08	-01	04	-03	-01
Intraception	02	06	-00	-05	-04	-08	-01	04	-04	-00
Succourance	04	96	-03	-05	-03	-05	-03	05	-05	-02
Dominance	03	07	-00	-06	-04	-10	-03	04	-04	-01
Abasement	02	05	02	-05	-04	-08	-02	08	-04	-03
Nurturance	05	09	02	-02	-03	-13*	02	06	-02	01
Change	03	08	04	-02	-01	-11	03	10	-04	01
Endurance	06	10	-01	-07	-03	-09	-00	-08	-00	02
Heterosexuality	04	06	01	-05	-03	-08	-01	-07	-02	-01
Aggression	05	07	03	-04	-02	-08	-01	-07	-04	-00

* Significant Level 0.01 **
                   0.05 *

TABLE NO. 524

PRODUCT GROUP - IV - DRESS MATERIAL/CLOTH

Partial Correlation Coefficient Between Attributes and EPPS Needs among

FEMALE

EPPS	Dark Colour	Diff. Types for Diff. Whether Conditions.	Feel Heavy While Wearing	Feel of the Cloth	Latest/ New Type of Material	Others' Opinion	Price	Sober/ Light Colour	Sober/ Design Plain	Type of Fabric
Achievement	07	-01	-01	-03	05	06	10	-02	-07	05
Deference	04	03	-04	-01	03	05	07	04	-03	04
Order	09	-05	-01	-03	08	05	06	02	-03	05
Exhibition	09	-01	02	-01	04	06	08	-02	-07	-02
Autonomy	07	-02	-03	-01	02	06	08	-01	-07	-06
Affiliation	09	-04	-02	-03	08	06	07	-02	-06	-00
Intraception	06	-08	-02	-02	02	01	04	-05	-06	-01
Succourance	10	-05	01	-10	03	07	04	-04	-06	-01
Dominance	04	01	01	-03	08	08	05	-01	-03	-01
Abasement	04	-00	01	01	06	10	03	-01	-03	-05
Nurturance	07	-06	-06	-02	09	04	04	-01	-06	-03
Change	08	-05	-05	-01	11	04	07	-01	-05	05
Endurance	06	-05	-03	-04	04	08	-08	-03	-05	00
Heterosexuality	08	-06	01	-04	06	06	-06	-03	-06	04
Aggression	02	-07	-04	-02	06	-01	01	-02	-07	01

Significant Level   0.01**
                0.05*