Influence of reference groups of brand connectivity of consumers

N. Vimaladhevi, M. Thaiyalnayaki

ABSTRACT

Purpose: the main aim of the study is to find the influence of reference groups on the factors of brand connectivity

Method: the study depends upon the primary data obtained through a well-structured questionnaire. The researcher applied convenience sampling method to obtain 389 responses from all the 15 zones of Chennai city and applied confirmatory factor analysis, structural equation model, linear multiple regression analysis and one-way analysis of the variance.

Findings: it is found that the primary reference group comprises family members with intimate connection and close friends with a dominating type whereas the secondary reference group consist of office colleagues, professionals in the office and superiors and subordinates

Practical Implications: the present research is focusing on the predominant reference groups frequently influences the changing behaviour of consumers and their brand choice behaviour, the factors directly determine the existence of profound brand connectivity among the consumers and to know the empirical relationship between reference group influences on brand connectivity perception of consumers in the study area.

Originality/Value: the study focus on measuring the impact of reference group of customers in consolidating the brand connectivity between customers and brands on the basis of emotional attachment and brand performance and satisfaction.

Keywords: Reference Group; Brand Connectivity; Brand Performance; Emotional Attachment.

RESUMEN

Objetivo: el objetivo principal del estudio es determinar la influencia de los grupos de referencia en los factores de conectividad de las marcas.

Método: el estudio se basa en datos primarios obtenidos mediante un cuestionario bien estructurado. El investigador aplicó el método de muestreo por conveniencia para obtener 389 respuestas de las 15 zonas de la ciudad de Chennai y aplicó el análisis factorial confirmatorio, el modelo de ecuaciones estructurales, el análisis de regresión lineal múltiple y el análisis unidireccional de la varianza.

Resultados: el grupo de referencia primario está formado por miembros de la familia con un vínculo íntimo y amigos íntimos de tipo dominante, mientras que el grupo de referencia secundario está formado por compañeros de trabajo, profesionales de la oficina y superiores y subordinados.

Implicaciones Prácticas: la presente investigación se centra en los grupos de referencia predominantes que influyen con frecuencia en el comportamiento cambiante de los consumidores y en su conducta de elección de marca, en los factores que determinan directamente la existencia de una profunda conectividad de marca entre los consumidores y en conocer la relación empírica entre las influencias de los grupos de referencia en...
INTRODUCTION

Reference groups are very important in the perspectives of brand connectivity in the marketing arena along with consumer behavioural changes. Generally, all types of consumers expect appropriate and profound references from the consumers with previous experience in the form of reference group to introduce the characteristic features and brand knowledge of a product and services. The consumption pattern, consumer involvement, behavioural changes and attitude of consumers towards product and services are influenced by different reference groups.\(^1\) Therefore, all the marketers and manufacturers are duty bound to focus on the potentiality of different reference groups in the society to change the behaviour of consumers in an optimistic way.\(^3\) The benefit of marketers depends upon the amount of influence created by the reference groups on consumers with the different demographic backgrounds.

After reviewing these above mentioned national and international reviews the researcher predominantly identified the existence of three research questions in the form of wide gaps in a continuous research on reference groups and brand connectivity namely.

1. What are all the predominant reference groups frequently influences the changing behaviour of consumers and their brand choice behaviour?
2. Among many brand connectivity factors, what are all the factors directly determine the existence of profound brand connectivity among the consumers?
3. Is there any empirical relationship between reference group influences on brand connectivity perception of consumers in the study area?

Therefore, the present research work is attempting in the direction of answering the above mentioned research questions through empirical evidences which can be obtained from the respondents in the study area.

The above mentioned research gaps encouraged the researchers to have the following research aims with a statistical and mathematical approach to prove the theory with empirical evidences.

1. The first aim of the study is to identify and validate the existing different reference groups among the consumers of Chennai city.
2. The second aim of this study is to identify the predominant factors explaining the existence of brand connectivity perception among the consumers.
3. The third aim of the study is to estimate the influence of demographic characteristics of consumers on their perception towards reference groups and brand connectivity.

Theoretical framework

The reference groups can give indications about characteristic features of different brands available in the market and motivate the consumers to have brand connectivity. The brand connectivity is a relationship between customers and the brands based on individual personality of customers and brand suitability, brand knowledge and brand association with the customers. The customer needs and desires of the brand also consolidate the existing brand connectivity through the brand characteristic features namely quality, price, product needs and sophistication involved in the brands.\(^4\) The brand connectivity can also be considered as an indicator for the nature of relationship between customer satisfaction and their repurchase intention to purchase the same brands.\(^6\) The sociological and reference groups are playing with important vital role in highlighting the need for the new customers and also use the latest technological innovations to share their opinion about different brand experience.\(^7\)

The reference groups are considered as the representations with certain beliefs, attitude and behaviour which can be easily aligned to the purchase behaviour of budding customers in the form of introducing the brand connectivity among the consumers. The segmentation of reference groups can be achieved only through the demographic characteristics, product needs, lifestyle perception, brand reputation, brand knowledge and prevailing competition in the marketing arena. There are five types of predominant reference groups namely primary groups, secondary groups, aspirational groups, dissociative groups and commercial groups respectively. These groups are found to influence brand connectivity factors which is a time bound phenomenon and consist of components brand advertisement, brand characteristics brand recall, brand experience and the brand

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satisfaction respectively. Therefore, the present study is focusing on measuring the impact of reference group of customers in consolidating the brand connectivity between customers and brands on the basis of emotional attachment and brand performance and satisfaction.

**Literature review**

Mehta(9) these authors identified and validated the predominant factors of reference groups in terms of celebrity advertisement and other commercial sources. In fact they empirically proved the influence of aspirational celebrities for the consumers and their subsequent impact on their practice behaviour. The commercial advertisements, celebrities involved in the commercial advertisement along with company reputation also found to influence the consumers in the form of reference groups.

Thomson(14) these authors were interested to prove the relationship between demographic background of consumers and their brand connectivity perception. It is found that there is a significant difference between male and female consumers in recalling the brands and also sharing their views about the brand experience. There is a significant influence of age, occupation, income, educational qualification are found to influence brand satisfaction and brand advertisement.

Lawrence(8) these authors focused on measuring the impact of two predominant reference groups namely primary group followed by secondary groups. In particular the study revealed that intimate family members and close friends are able to influence any consumer immediately through traditional sharing of information or electronic word-of-mouth. This primary group explained the brand experience through word-of-mouth and even displays their experience practically.

Escalas(12) this particular study identified the influence of secondary groups particularly for the consumers staying long time in their offices. The research revealed colleagues, professionals and officials particularly superior in an organisation found to influence the consumers in the form of powerful reference groups. Particularly the author identified that the private sector employees are mostly influenced by their superiors in purchasing the particular brand of product as they transparently share their brand experience.

Park(10) in another study the researchers identified that the consumers of any types of product can be classified into three heterogeneous groups with respect to their perception to brand connectivity. It is found from the study that the three heterogeneous groups are namely budding connectors, unambitious connectors and the profound connectors respectively. There is in deep association between brand connectivity perception of customers and their demographic background in changing the attitude towards brands.

Shukla(13) this innovative study also empirically identified the role of eccentric characters of individual customers and their personalities to decide their purchase behaviour. The study found that some of the consumers are highly eccentric and they always think differently against herd behaviour of consumers towards one particular brand. The influence of such personalities over the ordinary consumers is found to have profound effect from the sources of reference groups.

Reed(11) this particular study established the deep and significant relationship between reference group influence and brand choice behaviour of consumers. It is found from the study that primary reference groups mainly focus on brand reputation, brand experience and brand satisfaction whereas the secondary group mainly focus on brand recall characteristics on the basis of technological augmentation and latest innovations in the brands.

Ferraro(5) this particular study mainly focused on influence of different reference groups on the dependent factors brand characteristics, brand advertisement, brand recall, brand experience and the brand satisfaction respectively. It is found from the study that both the primary and secondary group are found to influence the brand experience of the consumers and favourite way for transforming weak brand connectivity to the strong brand connectivity respectively.

**METHOD**

This research is focused on primary data to verify the objectives and to test the hypotheses proposed by the researcher. The primary data is ascertained through a well structured questionnaire with logical sequence of variables to obtain the perception of consumers regarding their reference groups and brand connectivity. The well structured research instrument comprises four important segmentations namely demographic characteristics of consumers followed by their purchase details, reference group perceptions and brand connectivity perception. The first two parts comprises only optional type questions whereas third and fourth part is well structured
through five points scale statements. The customer comprises five important reference groups in the third part namely primary groups, secondary groups, aspirational groups, dissociative groups, commercial groups respectively. The fourth part of the questionnaire comprises five important brand connectivity factors logically namely brand advertisement, brand characteristics, brand recall, brand experience and the brand satisfaction. The five-point scale statements have five options namely strongly agree, agree, neutral, disagree and strongly disagree. Each of these options are given numerical values five, four, three, two, one during the data entry.

After framing the questionnaire based on their research gap and aims, the researcher conducted a pilot study to identify the reliability and validity of the research instrument. Therefore initially the researcher collected hundred responses from consumers of different parts of Chennai city. The researchers applied appropriate cronbach alpha method and obtained the value 0.876 which implies that the questionnaire formulated for the respondents is highly reliable and the respondents well understood each and every statements and able to give their rational opinion in an unbiased manner.

These above mentioned research aims motivate the researcher, in following relationships in the form of hypotheses namely,
1. There is a significant difference among the reference groups in the perception of consumers.
2. There is a significant difference among the factors of brand connectivity in the perception of consumers.
3. There is a significant influence of reference groups on the factors of brand connectivity perception of consumers.

After conducting a pilot study researcher conducted the main study to carry out the research which aimed at verifying the research aims and to test the hypothesis with empirical evidences. The researcher adopted convenience sampling method to obtain 389 responses from all the 15 zones of the great Chennai city. The researcher allowed the respondents to take 10 to 15 days to fill the questionnaire without any flaws and also requested them to interact with the researcher when they have their doubts. The researcher periodically interacted with them and cleared the doubts and paved the way to fill the questionnaire without any bias. After collecting 389 responses with very good validity the researcher entered the responses with numerical coding in the SPSS package version 23 to anatomically analyse the primary data with the help of mathematical and statistical tools. The researcher applied confirmatory factor analysis, structural equation model, linear multiple regression analysis and one-way analysis of the variance to test the above mentioned hypothesis.

RESULTS AND DISCUSSION
In the first stage of analysis the researcher intended to operate confirmatory factor analysis to confirm the factors of reference groups followed by the factors of brand connectivity. After entering the data particularly for the factors of reference groups and brand connectivity the researcher computed total average scores for each and every factor of reference groups and brand connectivity to apply confirmatory factor analysis. The main reason for applying confirmatory factor analysis is to confirm the factors of reference groups namely primary reference group, secondary reference group, aspirational reference group, dissociative reference group and commercial reference group, similarly the brand connectivity factors must also become found namely brand advertisement, brand characteristics, brand recall, brand experience and brand satisfaction. The confirmatory factor analysis can be achieved through the testing of three hypotheses proposed by the researcher to the six-fit indices obtained for reference groups and the brand connectivity respectively. The six-fit indices chi-square value, P value, comparative index, normal fit index, goodness of fit index and root mean square error of approximation must satisfy their benchmark values independently for reference groups and the brand connectivity factors. The results of the confirmatory factor analysis for reference groups is given below.

Figure 1. Model fit indices and bench marks for validation of reference group
Table 1. Model fit indices and bench marks for validation of reference group

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Fit indices</th>
<th>Values</th>
<th>Bench mark values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chi-square</td>
<td>10,541</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>P-value</td>
<td>0,541</td>
<td>&gt;0,05</td>
</tr>
<tr>
<td>3</td>
<td>Goodness of fit index (GFI)</td>
<td>0,989</td>
<td>&gt;0,9</td>
</tr>
<tr>
<td>4</td>
<td>Comparative fit index (CFI)</td>
<td>0,986</td>
<td>&gt;0,9</td>
</tr>
<tr>
<td>5</td>
<td>Normed fit index (NFI)</td>
<td>0,984</td>
<td>&gt;0,9</td>
</tr>
<tr>
<td>6</td>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0,07</td>
<td>&lt;=0,08</td>
</tr>
</tbody>
</table>

From the above table 1 and figure 1 it is found that all the six-fit indices for the reference groups are found to satisfy required benchmark values as stated in the table which implies that the hypothesis proposed by the researcher namely there is a significant difference among the factors of reference group in the customer perception is accepted and supported.

A similar approach of confirmatory factor analysis is applied on the factors of brand connectivity and the diagram as well as the table for the six-fit indices are displayed below.

Table 2. Model fit indices and bench marks for validation of brand connectivity

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Fit indices</th>
<th>Values</th>
<th>Bench mark values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chi-square</td>
<td>14,567</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>P-value</td>
<td>0,382</td>
<td>&gt;0,05</td>
</tr>
<tr>
<td>3</td>
<td>Goodness of fit index (GFI)</td>
<td>0,990</td>
<td>&gt;0,9</td>
</tr>
<tr>
<td>4</td>
<td>Comparative fit index (CFI)</td>
<td>0,988</td>
<td>&gt;0,9</td>
</tr>
<tr>
<td>5</td>
<td>Normed fit index (NFI)</td>
<td>0,987</td>
<td>&gt;0,9</td>
</tr>
<tr>
<td>6</td>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0,07</td>
<td>&lt;=0,08</td>
</tr>
</tbody>
</table>

Figure 2. Model fit indices and bench marks for validation of brand connectivity

From the above table 2 and figure 2 researcher meticulously observed that the six-fit indices exactly satisfy the required benchmark value to support and accept the proposed hypothesis that there is a significant difference among the factors of brand connectivity in the perception of customers in the study area.

After confirming the factors of reference groups and brand connectivity, the researcher considered the five factors of reference groups as independent variables and 5 factors of brand connectivity as dependent factors to run the regression analysis in this scenario. The application of linear multiple regression analysis for the influence of reference groups and brand connectivity clearly revealed the following results.

Table 3. Variance of brand connectivity

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.384</td>
<td>0.348</td>
<td>0.339</td>
<td>0.46821</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Commercial group, Aspirational group, Primary group, Disassociative group, Secondary group

From the above table 3 it is found that the R square value, adjusted R square value and standard error of the mean are found to exhibit the values above 0.3 and their significant values proved the existence of significant relationship between reference group factors and brand connectivity. It is further consolidated and proved through the following one-way analysis of variance table.

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Table 4. F-Value computation for brand connectivity

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>18,743</td>
<td>5</td>
<td>3,749</td>
<td>17,100</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>108,293</td>
<td>494</td>
<td>0,219</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>127,036</td>
<td>499</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: brand connectivity
b. Predictors: (Constant), Commercial group, Aspirational group, Primary group, Dissociative group, Secondary group

From the above table 4 it is found that the significant F-value and probability significant values at 5 percent level clearly revealed the significant influence of reference group factors on brand connectivity which can be further studied through the estimation of individual influences as shown in the table below.

Table 5. Individual influence of reference groups on brand connectivity

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1,994</td>
<td>0,181</td>
<td>0,203</td>
<td>10,999</td>
</tr>
<tr>
<td>Primary group</td>
<td>0,144</td>
<td>0,033</td>
<td>0,203</td>
<td>4,354</td>
</tr>
<tr>
<td>Secondary group</td>
<td>0,005</td>
<td>0,042</td>
<td>0,246</td>
<td>4,122</td>
</tr>
<tr>
<td>Aspirational group</td>
<td>0,170</td>
<td>0,036</td>
<td>0,216</td>
<td>4,703</td>
</tr>
<tr>
<td>Dissociative group</td>
<td>0,080</td>
<td>0,038</td>
<td>0,104</td>
<td>2,129</td>
</tr>
<tr>
<td>Commercial group</td>
<td>-0,016</td>
<td>0,037</td>
<td>-0,320</td>
<td>-3,427</td>
</tr>
</tbody>
</table>

a. Dependent Variable: brand connectivity

From the above table 5 it is found that the beta value, t-values probability values for the five factors of reference groups namely primary group, secondary group, aspirational group, dissociative group and the commercial groups are statistically significant at 5 percent level to estimate the influence on brand connectivity. This shows that the brand choice behaviour and consumer behaviour can be easily influenced by the dominant reference groups distributed over primary group, secondary group and aspirational group particularly. This analysis also tested the third hypothesis that there is a significant influence of reference groups or brand connectivity perception of customers. The application of linear multiple regression analysis supports this hypothesis and the hypothesis is accepted at 5 % level.

After finding and establishing the relationship between reference groups and brand connectivity factors, the researchers sharply estimated the role of demographic variables on the five factors of reference groups and five factors of brand connectivity. The application of one-way analysis of variance on the independent demographic variables and the dependent factors of reference groups and the brand connectivity revealed the following results.

Table 6. Influence of demographic variables on reference groups and brand connectivity

<table>
<thead>
<tr>
<th>Factors</th>
<th>F-value</th>
<th>Sig</th>
<th>Variables</th>
<th>Mean values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary group</td>
<td>2,559</td>
<td>0,027</td>
<td>Gender</td>
<td>4,32</td>
</tr>
<tr>
<td>Secondary group</td>
<td>4,688</td>
<td>0,000</td>
<td>Age</td>
<td>4,59</td>
</tr>
<tr>
<td>Aspirational group</td>
<td>4,859</td>
<td>0,000</td>
<td>Education</td>
<td>4,23</td>
</tr>
<tr>
<td>Disassociative group</td>
<td>3,111</td>
<td>0,009</td>
<td>Occupation</td>
<td>3,99</td>
</tr>
<tr>
<td>Commercial group</td>
<td>1,482</td>
<td>0,004</td>
<td>Income</td>
<td>4,12</td>
</tr>
<tr>
<td>Brand advertisement</td>
<td>4,879</td>
<td>0,000</td>
<td>Gender</td>
<td>4,15</td>
</tr>
<tr>
<td>Brand characteristics</td>
<td>1,262</td>
<td>0,009</td>
<td>Age</td>
<td>4,28</td>
</tr>
<tr>
<td>Brand recall</td>
<td>3,908</td>
<td>0,002</td>
<td>Occupation</td>
<td>4,58</td>
</tr>
<tr>
<td>Brand experience</td>
<td>3,810</td>
<td>0,002</td>
<td>Occupation</td>
<td>4,28</td>
</tr>
<tr>
<td>Brand satisfaction</td>
<td>3,903</td>
<td>0,002</td>
<td>Income</td>
<td>4,16</td>
</tr>
</tbody>
</table>

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From the above table 6 it is found that the F-values for the factors of reference groups and brand connectivity factors are significant at 5 percent level. The table also revealed that the gender influences all the five reference groups followed by age, educational qualification, occupation and income. The occupation of the customers is found to influence all the five factors of reference groups. Similarly brand characteristics, brand recall and brand satisfaction are affected by the demographic variables age, gender, educational qualification and occupation.

**CONCLUSIONS**

It is found from the study that reference groups are considered as important motivating domain for all types of consumers with different demographic backdrop. It is concluded from the study that the primary reference group comprises family members with intimate connection and close friends with a dominating type whereas the secondary reference group consist of office colleagues, professionals in the office and superiors and subordinates. The celebrity endorsement, celebrity advertisements are systematically transformed into aspirational reference groups for all the consumers and the consumers perceived that the celebrities are the most influencing personalities in their life to purchase any types of products they advertise.

Particularly film stars, sports personnel are found to influence the aspirations of the consumers and also motivate the consumers through the aspirational points to purchase the products. Dissociative group and the commercial reference groups are also found to influence all the factors of brand connectivity namely brand advertisement, brand characteristics, brand experience, brand recall and brand satisfaction. The study revealed that there is a significant influence of reference groups on the overall factors of brand connectivity. The study also concluded that there exist different types of brand connectivity namely weak connectivity before brand satisfaction and a strong connectivity after brand satisfaction. The brand connectivity is a time bound phenomenon and it can be considered as the profound relationship when it comes in the psychology of consumers after their brand satisfaction before their brand loyalty. The demographic characteristic features of the consumers are very important to decide their perception towards reference groups and factors of brand connectivity.

**Marketing implications**

The present study and their findings lead to the following marketing implications to the marketers and manufacturers. The marketing of products through advertisement must be placed on five different reference groups for the consumer’s namely primary group, secondary group, aspirational group, dissociative group and commercial group. The reference group is profound in influencing the consumers of different brands particularly the reference group is impressed by the brand reputation therefore it is suggested that all the marketers and manufacturers are expected to focus on brand loyalty strategies to retain their consumers and also to increase their brand reputation.

The study also found that demographic characteristics are very important for the aspirational reference group and the influence therefore the marketers and manufacturers should introduce appropriate celebrities to impress and motivate the aspirations of consumers and their brand connectivity. The study concluded the existence of weak brand connectivity and strong brand connectivity therefore it is suggested to the marketers and manufacturers that they must use the social media strategies to convert the weak brand connectivity prevailing among the consumers to the strong brand connectivity.

**Limitations**

This particular research is carried out within the bounded conditions of certain justified limitations. The study is conducted in a reputed and the great Chennai metropolitan city which consist of only urban population whereas the study did not cover semiurban and rural consumers which are not the part of the Chennai city. The study is restricted and limited to the 389 responses with an unbiased approach. The results and findings and conclusions are completely based on urban consumers which cannot be generalized other part of the country or other part of the world. There are several reference groups in the marketing research but the researcher mainly focused on five important reference groups more suitable and appropriate for Chennai consumers in their cultural backdrop. Similarly the brand connectivity factors are appropriately selected for the limitation of the weak connectivity and strong connectivity. The study is restricted to 5 important brand connectivity factors alone.

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Writing - proofreading and editing: N. Vimaladhevi, M. Thaiyalnayaki.