A Study on Influence of Software Familiarity Over Software Consumption Among Non-Institutional Consumers in Tamilnadu

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ABSTRACT
The science and technology has brought in many inventions to mankind. By and large, today computerization has occupied an indispensable part in every human life. Software, being the artificial brain, assists the computer in providing services to human life much in this regard. Since software is a technical product, consumers who are not much familiar with the software do not consume or utilize it in a large level. Further the software, which are user friendly and need no technical familiarity, are widely used or consumed by many of the consumers at a higher level. The study mainly assesses the software familiarity and the level of utilization of software by non-institutional consumers in Tamil Nadu. It is observed in the study that software consumption depends upon the variables such as age, gender, monthly income, educational qualification, profession, place of residence, marital status, community, religion, assets, liabilities, size of the family, family system, purpose of using software languages known, prices of software, nature of the software, financial status of users, social status, purchase practice. Except East region in all other regions in Tamil Nadu; the domicile status has a significant influence on software consumption. It is concluded that the familiarity of software is highly indispensable for any type of consumers.

Key words: software familiarity, software consumption, influencing factor, user friendly, level of utilization, domicile status.

1. Introduction
The science and technology has brought in many inventions to mankind. By and large, today computerization has occupied an indispensable part in every human life. Today computerization has become an indispensable part of human life. Tamil Nadu being a fore runner in many respects leads the computerization drive in India. In computerization special effort is made in the state for the promotion of hardware and software products. In spite of all efforts taken by the government and other organizations, software consumption still faces slow growth in several parts of state.

The major factor which determines software consumption is Software familiarity. The well familiar consumers consume much than an unfamiliar one. Software familiarity varied among consumers in different regions. The study is conducted to know about the software knowledge of software users and the factors influencing the consumption pattern of non-institutional software users in Tamil Nadu. This study enlightens the influence of level of Software familiarity over its consumption.

McManus, John et al. (2005) in their study titled, “The global software industry” identified that Indian companies are developing expertise in the vertical domain areas in software rather than more traditional code programming. It is pointed out in the study that comparing India with China, as an outsourcing destination, one of the important strengths of China is its huge domestic software market that attracts domestic software firms as well as foreign software firms.

Nasir Aziz Rizvi, S. (2005), conducted a study on “Marketing of software in the changing scenario of world trade since 1990”. He has attempted to examine the development of software, exports, marketing strategies, marketing network and government policies in India. He
identified that to become a successful global player, India needs to develop successful persons in the domestic and International market. For this the software industry should aim at expanding the market through extensive market research, proper brand building and targeted customer segmentation. It is further reported that the Software industry in India must invest soundly in product development, build brands for International market and acquire assured high quality standards.

Ashish Arora (2006), in the study titled “The Indian Software Industry and its Prospects” identified that India has emerged as a major exporter of software services in less than a decade. Indian exports continue to be mostly services with modest technology content and there is little evidence of successful product development. Indian firms are participating in software innovation. This has helped the industry to provide higher value added products and services.

d) The availability of licensed software is rare even though the companies are ready to buy.

e) Due to lack of software knowledge no company has utilized fully.

3. Methodology and Sampling

The present paper is an outcome of the findings of research conducted in Tamil Nadu during 2009-2011. The entire Tamil Nadu has been divided into four zones namely, South, North, East and West Zone. The South zone has eight districts namely, Kanyakumari, Thoothukudi, Theni, Tirunelveli, Sivagangai, Madurai, Ramanathapuram, and Virudhunagar. The eight districts included in North zone are Dharmapuri, Chennai, Vellore, Krishnagiri, Thiruvallur, Villupuram, Kanchipuram and Thiruvannamalai. Ariyalur, Nagapattinam, Thiruvarur, Perambalur, Cuddalore, Pudhukottai, Thanjavur and Tiruchirapalli are assumed as East zone. The West zone includes The Nilgiris, Dindigul, Karur, Namakkal, Salem, Coimbatore, Erode, and Tiruppur.

Total samples of 6621 computer users with name and their addresses have been received from the dealers of hardware and software in Tamil Nadu. Out of that 2000 samples have been selected at random. Stratified random sampling method has been followed to select the appropriate respondents. Accordingly, in each zone 500 respondents have been selected through lottery method. A structured questionnaire was send to all respondents. From the received 357 questionnaires 250 questionnaires have been taken as valid.

4. Tools

The correlation analysis helps to measure intensity of relationship between two variables. Co-efficient of correlation (r), Co-efficient of determination (r²) and ’t’ test have been employed to find out the relationship between the software familiarity and software consumption. Multiple regression analysis has also been made to identify the relationship between the determinants and software consumption among individual consumer in Tamil Nadu.

5. Determinants of Software Consumption

Software consumption represents the consumption or utilization of software in terms of usage of different types of software by the consumers or users. Level of consumption of software mainly depends upon the familiarity of the user or
consumer in the concerned software. Apart from familiarity, the level of consumption depends upon several other variables. It is observed in the study that software consumption depends upon the other variables such as age, gender, monthly income, educational qualification, profession, place of residence, marital status, community, religion, assets, liabilities, size of the family, family system, purpose of using software, languages known, prices of software, nature of the software, financial status of users, social status, and purchase practice. Hence all these variables are also considered in the analysis as determinants of software consumption.

5.1 Software Familiarity and Software consumption
Since software is a technical product, consumers who are not much familiar with the software do not consume or utilize the software in large. Consumers with higher software familiarity consume or utilize the software to its maximum. Consumers of software use any software only if they are well familiar with the software. Similarly consumers or users who are familiar in many number of software use them all to its maximum. Further the software which are so user friendly and need no technical familiarity in the software are used by many of the consumer at a higher level. Hence, the consumption of software mainly depends upon the familiarity of software. Thus there is a relationship between the software familiarity and software consumption.

5.2 Software familiarity and Software consumption in Tamil Nadu
A direct relationship between the software familiarity and consumption of software is observed and therefore the relationship between the software familiarity and software consumption is analyzed through correlation co-efficient, co-efficient of determination and ‘t’ test. The computed correlation co-efficient and co-efficient of determination and the results of ‘t’ test are presented in Table 1.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Regions</th>
<th>r</th>
<th>r²</th>
<th>‘t’ value</th>
<th>State of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South</td>
<td>.857*</td>
<td>.73 4</td>
<td>129.54 6</td>
<td>Significant</td>
</tr>
<tr>
<td>2</td>
<td>North</td>
<td>.941*</td>
<td>.88 5</td>
<td>122.13 6</td>
<td>Significant</td>
</tr>
<tr>
<td>3</td>
<td>East</td>
<td>.639*</td>
<td>.40 8</td>
<td>44.871 6</td>
<td>Significant</td>
</tr>
<tr>
<td>4</td>
<td>West</td>
<td>.716*</td>
<td>.51 3</td>
<td>67.702 6</td>
<td>Significant</td>
</tr>
<tr>
<td>5</td>
<td>Tamil Nadu</td>
<td>.799*</td>
<td>.63 8</td>
<td>329.15 6</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table 1 shows the relationship between software familiarity and software consumption in four different zones of Tamil Nadu. The relationship is indicated through a positive co-efficient correlation of 0.857, 0.941, 0.639, 0.716 and 0.799 respectively in South, North, East, West and Tamil Nadu. It is clear from the results of ‘t’ test that in all zones and in Tamil Nadu the correlation between software familiarity and software consumption is significant. It indicates that software familiarity has a relationship with software consumption in all zones and in Tamil Nadu. Further the co-efficient of determination of correlation reveals that in Tamil Nadu 63.8 per cent of the total consumption of software is related to software familiarity.

5.3 Software familiarity and consumption of different types of software
There are several types of software used by consumers for various purposes. Consumption of different types of software in Tamil Nadu is analyzed in this part. The popular software taken for analysis is: Windows, Max OS, UNIX, DOS and Linux. The relationship between the familiarity of each category of software and consumption of software in different regions are analyzed individually and presented below.

i) Operating system software and software consumption
Consumers having differing familiarity in operating system software such as Windows, Max OS, UNIX, DOS and Linux consume or use them differently. Those who are not familiar in the software does not use or consume it at all. Those who are familiar in the software alone use it to its maximum. Hence familiarity in operating system determines the software consumption or utilization. In order to find out the relationship between the software familiarity and software consumption in operating system, coefficient of correlation, co-efficient of determination and the ‘t’ test are worked out and the findings of the results are presented in Table 2.

Table 2
Familiarity in operating system and software consumption

Table 2 shows the relationship between software familiarity and software consumption in operating system in all zones in Tamil Nadu. The table reveals that there is a positive correlation between software familiarity and software utilization among non-institutional consumers with a co-efficient of correlation of 0.653, 0.679, 0.619, 0.751 and 0.671 respectively in South, North, East, West and Tamil Nadu. Further the co-efficient of determination of correlation reveals that in Tamil Nadu familiarity in operating system of the consumer, accounts for 45 per cent of the total consumption of software in operating system. It is clear from the findings of ‘t’ test that in all zones in Tamil Nadu the correlation coefficient between familiarity in operating system and software consumption is significant at 1 per cent level. Hence it can be concluded that software familiarity has formidably become a major determinant of software consumption.

(ii) Entertainment software and software consumption

Consumers having familiarity in entertainment software install more than one entertainment software such as games, audio and video and consume or use them differently. Those who are familiar in the software alone use it to its maximum. Hence familiarity in entertainment determines the software consumption or utilization. In order to find out the relationship between the software familiarity and software consumption in entertainment, correlation coefficient, coefficient of determination and ‘t’ test is calculated. The computed correlation coefficient, coefficient of determination and the ‘t’ test are worked out and the findings of the results are presented in Table 3.

Table: 3
Familiarity in entertainment software and software consumption

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Regions</th>
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<td>40.703</td>
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<tr>
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<td>East</td>
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<td>.38 3</td>
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<tr>
<td>4</td>
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<td>.751 *</td>
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<tr>
<td>5</td>
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<td>.671 *</td>
<td>.45 0</td>
<td>224.26</td>
<td>Significant</td>
</tr>
</tbody>
</table>

* Significant at 1 per cent level

Table 3 shows the relationship between the software familiarity and software consumption in entertainment in four different zones in Tamil Nadu. It is clear from table that familiarity in entertainment software among individual consumers in different zones of Tamil Nadu are positively correlated with the software consumption with a co-efficient of correlation of 0.563, 0.831, 0.512, 0.366, and 0.561 respectively in South, North, East, West and Tamil Nadu. Further the results of the ‘t’ test reveals that in all zones and in Tamil Nadu, the correlation between software familiarity and consumption of entertainment software is significant at 1 per cent level. Further the co-efficient of determination of correlation reveals that in Tamil Nadu 31.5 per cent of the total consumption of software is accounted by software familiarity.

(iii) Special application software and software consumption

Special application software is mostly used by the engineers and designers. The frequently used special application software such as AutoCAD, 3 Dimensions Architectural, Scala, Flash, Dream viewer, and Photo shop are inducted to find out the relationship between familiarity in special application software and software consumption. The correlation co-efficient, co-efficient of determination, and ‘t’ test is calculated and the findings of the results are presented in Table 4.

Table: 4
Familiarity in special application software and software consumption

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Regions</th>
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<th>r²</th>
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<td>North</td>
<td>.831 *</td>
<td>.691</td>
<td>65.762</td>
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</tr>
<tr>
<td>3</td>
<td>East</td>
<td>.512 *</td>
<td>.262</td>
<td>32.186</td>
<td>Significant</td>
</tr>
<tr>
<td>4</td>
<td>West</td>
<td>.366 *</td>
<td>.134</td>
<td>25.946</td>
<td>Significant</td>
</tr>
<tr>
<td>5</td>
<td>Tamil Nadu</td>
<td>.561 *</td>
<td>.315</td>
<td>168.02</td>
<td>Significant</td>
</tr>
</tbody>
</table>

*Significant at 1 per cent level
The table 4 highlights the relationship between the familiarity of special application software and software consumption in different zones in Tamil Nadu. It is clear from table that the familiarity of special application software among individual consumers in different zones in Tamil Nadu are positively related to the consumption of special application software with co-efficient correlation of 0.552, 0.866, 0.729, 0.472 and 0.596 respectively in South, North, East, West and Tamil Nadu. Moreover from the results of 't' test of all zones and in Tamil Nadu, the correlation between software familiarity and software consumption of special application software is significant at 1 per cent level. Further the table reveals that the co-efficient of determination in Tamil Nadu is 35.5 per cent of the total consumption of software is accounted by software familiarity.

(iv) Office Automation software and software consumption

Consumers having differing familiarity in office automation software such as Page maker, Coral draw, Tally, Nero CD writer, Adobe reader and MS outlook consume or use them differently. Those who are familiar in the office automation software alone use it to its maximum. Hence familiarity in office automation determines the software consumption or utilization. In order to find out the relationship between the familiarity in office automation software and software consumption, the correlation coefficient, coefficient of determination and ‘t’ test are worked out and the findings of the results are presented in Table 5.

Table 5 shows the relationship between the software familiarity and software consumption in Office automation among individual consumers in different zones in Tamil Nadu. The relationship is indicated through a positive coefficient of correlation of 0.625, 0.824, 0.318, 0.621, and 0.576 respectively in South, North, East, West and Tamil Nadu. It is clear from table the results of the ‘t’ test of South, North, East, West, and in Tamil Nadu the correlation between software familiarity of office automation software and software consumption is significant at 1 per cent level. The correlation co-efficient between software familiarity of office automation software and software consumption in east zone is significant at 5 per cent level. Further it is observed from table that the co-efficient of determination of correlation in Tamil Nadu is 32.2 per cent of the total consumption of software in office automation is accounted by familiarity of office automation software.

(v) General purpose software and software consumption

Most of the consumers are having a level of familiarity in general purpose software such as Google Earth, Word Web, and Spreadsheet and use them accordingly. In order to find out the level of influence of software familiarity in general purpose software and software consumption, the co-efficient of correlation, co-efficient of determination and the ‘t’ test is calculated and presented in Table 6.

Table 6

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Regions</th>
<th>r</th>
<th>r²</th>
<th>‘t’ value</th>
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<td>.625*</td>
<td>.39</td>
<td>199.79</td>
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</tr>
</tbody>
</table>

*Significant at 1 per cent level **Significant at 5 per cent level

Table: 5

Familiarity in Office Automation software and Software consumption

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Regions</th>
<th>r</th>
<th>r²</th>
<th>‘t’ value</th>
<th>State of significance</th>
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<tr>
<td>2</td>
<td>North</td>
<td>.824*</td>
<td>.67</td>
<td>64.056</td>
<td>Significant</td>
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<tr>
<td>3</td>
<td>East</td>
<td>.318*</td>
<td>.10</td>
<td>18.114</td>
<td>Significant</td>
</tr>
<tr>
<td>4</td>
<td>West</td>
<td>.621*</td>
<td>.32</td>
<td>174.84</td>
<td>Significant</td>
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<tr>
<td>5</td>
<td>Tamil Nadu</td>
<td>.576*</td>
<td>.355</td>
<td>184.069</td>
<td>Significant</td>
</tr>
</tbody>
</table>

*Significant at 1 per cent level **Significant at 5 per cent level
Familiarity in general purpose software and software consumption

<table>
<thead>
<tr>
<th>Sl. No</th>
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<th>r²</th>
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<td>.577*</td>
<td>.333</td>
<td>31.075</td>
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<tr>
<td>3</td>
<td>East</td>
<td>.427*</td>
<td>.182</td>
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<tr>
<td>4</td>
<td>West</td>
<td>.606*</td>
<td>.367</td>
<td>50.246</td>
<td>Significant</td>
</tr>
<tr>
<td>5</td>
<td>Tamil Nadu</td>
<td>.559*</td>
<td>.312</td>
<td>167.228</td>
<td>Significant</td>
</tr>
</tbody>
</table>

*Significant at 1 percent level

Table 6 highlights the relationship between the software familiarity and software consumption in general purpose in all zones in Tamil Nadu. The table shows that software familiarity among individual consumers in different zones in Tamil Nadu. The relationship is indicated through a positive co-efficient of correlation of 0.717, 0.577, 0.427, 0.606 and 0.559 respectively in South, North, East and West zone and Tamil Nadu. Further the table shows the results of 't' test that in all zones in Tamil Nadu, the correlation co-efficient between familiarity in general purpose software and software consumption is significant at 1 per cent level. Further exhibits the co-efficient of determination of correlation reveals that in Tamil Nadu 31.2 per cent of the total consumption of software is accounted by software familiarity.

Browsing software and software consumption

Different consumers have familiarity in either one or more browsing software. The prominent browsing software is Internet Explorer, Opera, Google Chrome, Mozilla Firefox and Bit Torrent. In order to find out the relationship between the familiarity in browsing software and software consumption, the correlation co-efficient, co-efficient of determination and 't' test is calculated and the result is presented in Table 7.

<table>
<thead>
<tr>
<th>Sl. No</th>
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<th>t value</th>
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<td>.876</td>
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<td>3</td>
<td>East</td>
<td>.276*</td>
<td>.076</td>
<td>15.509</td>
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<tr>
<td>4</td>
<td>West</td>
<td>.627*</td>
<td>.393</td>
<td>53.13</td>
<td>Significant</td>
</tr>
<tr>
<td>5</td>
<td>Tamil Nadu</td>
<td>.627*</td>
<td>.393</td>
<td>199.61</td>
<td>Significant</td>
</tr>
</tbody>
</table>

* Significant at 1 per cent level
** Significant at 5 per cent level

Table 7 shows the relationship between software familiarity and software consumption in browsing among individual consumers in four different zones in Tamil Nadu. The relationship is indicated through a positive co-efficient of correlation of 0.541, 0.936, 0.276, 0.627 respectively in South, North, East and West zone and Tamil Nadu. Further the table exhibits that the correlation between familiarity in browsing software and software consumption in South, North, West and all zones are significant at 1 per cent level and in East zone at 5 per cent level. The co-efficient of determination of correlation reveals that 39.3 per cent of the total consumption of software in Tamil Nadu is related to software familiarity in browsing.

Communication Software and software consumption

Individual consumers are having familiarity in communication software such as Yahoo Messenger, Skype, Google Talk, Rediff, MSN, and OoVoo, use them according to their familiarity in the respective software. In order to find out the relationship between the familiarity in communication software and software consumption, the correlation co-efficient, co-efficient of determination, and 't' test are calculated and the result is presented in Table 8.
Table 8
Familiarity in communication software and software consumption

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Regions</th>
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<td>.256</td>
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<td>.341</td>
<td>38.837</td>
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<td>.781*</td>
<td>.610</td>
<td>82.606</td>
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<td>5</td>
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<td>.739*</td>
<td>.546</td>
<td>271.91</td>
<td>Significant</td>
</tr>
</tbody>
</table>

*Significant at 1 per cent level

Table 8 shows the relationship between the familiarity in communication software and software consumption in Tamil Nadu. Further, the table shows that the software familiarity among individual consumers in different zones in Tamil Nadu are positively related to the consumption of communication software with a co-efficient of correlation of 0.370, 0.516, 0.584, 0.781, and 0.739 respectively in South, North, East, West and Tamil Nadu. It is clear from the results of ‘t’ test that the correlation co-efficient between the software familiarity and consumption of software is significant at 1 per cent level. Further, the co-efficient of determination of correlation reveals that 54.6 per cent of the total consumption of software in Tamil Nadu is accounted by software familiarity of communication software.

(viii) System maintenance software and software consumption

Consumers having familiarity in system maintenance software such as Anti spyware, AVG, Norton and Panda consume them according to the familiarity in the concerned software. In order to study the relationship between the familiarity in system maintenance software with software consumption, the correlation co-efficient, co-efficient of determination and ‘t’ test are calculated and the results is presented in Table 9.

Table 9
Familiarity in system maintenance software and software consumption

<table>
<thead>
<tr>
<th>No</th>
<th>Regions</th>
<th>r</th>
<th>r²</th>
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<td>East</td>
<td>.626*</td>
<td>.392</td>
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<tr>
<td>5</td>
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<td>.573*</td>
<td>.328</td>
<td>173.297</td>
<td>Significant</td>
</tr>
</tbody>
</table>

*Significant at 1 per cent level

Table 9 highlights the relationship between the familiarity of system maintenance software and software consumption in Tamil Nadu. The table clearly shows that software familiarity in different zones in Tamil Nadu is positively related to the consumption of system maintenance software with a co-efficient of correlation of 0.684, 0.376, 0.736, and 0.573 respectively in South, North, East, West and Tamil Nadu. It is observed from the findings of ‘t’ test that the correlation co-efficient between the software familiarity and consumption of system maintenance software of different zones are significant at 1 per cent level. Further the co-efficient of determination of correlation reveals that 32.8 per cent of the total consumption of software is accounted by the software familiarity in system maintenance software in Tamil Nadu. Analysis of software familiarity and software consumption and the relationship among them in different software in different zones in Tamil Nadu clearly reveals that software familiarity has a close relationship with the software consumption. But it cannot be ignored that beyond this software familiarity, there are several other variables which have also a role in the consumption of software.

6. DETERMINANTS OF SOFTWARE CONSUMPTION

The analysis of software consumption reveals that in addition to software familiarity there are several other factors which have influence on the level of software consumption or utilization in Tamil Nadu. Consumption differed from zone to zone. While a few factors have been the determinants in one zone the same have not been the determinants in some other zones. Hence the factors identified as determinants have differed from zone to zone.

In order to study the level of influence of these independent factors on software consumption, multiple regression analysis is attempted. There are 20 other variables identified as having influence on software consumption. They are: Age, Area, Sex, Monthly Income, Personal Factor, Social Status, Marital Status, Family System, Size of the family, Community, Religion, Education level, Purpose of...
Using Software, Languages Known, Number of Members in the family, Profession, Nature of the software, Purchase practice, Assets and Liabilities. Factor analysis reduced these 20 variables into handsome number of factors. Though the dependent factor i.e software consumption is so certain in all zones, the independent factors differed from zone to zone. Further the variables included in each factor have also differed.

Multiple Regression Analysis helps to locate the undermining relationship among the multiple independent factors with the dependent factor. Further it explains the strength of relationship between the independent factors and dependent factor. In the study, software consumption is the dependent factor.

### 6.1 Determinants of software consumption in Tamil Nadu

It is observed that in Tamil Nadu there are 10 independent variables including software familiarity determines software consumption. The independent variables such as financial status, monthly income, personal factor, status factor, marital status, gender, family system, size of the family, miscellaneous, software familiarity. The influence of the independent variables on software consumption is assessed through multiple regression analysis and results are presented below.

\[
Y = -22.692b_0 - 0.080b_1 + 0.123b_2 + 0.080b_3 + 0.022b_4 + 0.020b_5 - 0.030b_6 + 0.030b_7 + 0.030b_8 + 0.069b_9 + 0.751b_{10}
\]

Where,

\[b_0\text{-Constant, } b_1\text{-Financial status, } b_2\text{-Monthly income, } b_3\text{-Personal factor, } b_4\text{-Status factor, } b_5\text{-Marital status, } b_6\text{-Gender, } b_7\text{-Family system, } b_8\text{-Size of the family, } b_9\text{-Miscellaneous, } b_{10}\text{-Software familiarity.}\]

\[R = 0.802; R^2 = 0.640; \text{Adjusted } R^2 = 0.625; \text{SE} = 18.2913\]

While analyzing the multiple regression equation with standardized co-efficient, it is clear that the variable familiarity of software had the higher level influence over other. It indicates that one unit of change in this variable makes a change of 0.751 units on the dependent variable i.e software consumption. The other variables having significant impact on dependent variable are personal factor (0.089 units).

### 6.2 Determinants of software consumption in South zone

In South zone there are nine independent variables including software familiarity determine software consumption. The relationship between independent variables identified through exploratory factor analysis are personal factor, status factor, nature of the software, financial status, monthly income, purchase practice, miscellaneous and software familiarity. The level of influence of the independent factors on the dependent factor as measured through multiple regression analysis is presented below.

\[
Y = -16.382b_0 + 0.797b_1 + 0.089b_2 + 0.041b_3 - 0.090b_4 + 0.047b_5 + 0.033b_6 + 0.027b_7 - 0.012b_8 - 0.11b_{09}
\]

Where,

\[b_0\text{-Constant, } b_1\text{-Softwarefamiliarity, } b_2\text{Personal factor, } b_3\text{-Status factor, } b_4\text{-Financial status, } b_5\text{-Family system, } b_6\text{-Monthly income, } b_7\text{-Size of the family, } b_8\text{-Purpose, } b_{90}\text{-Miscellaneous.}\]

\[R = 0.862; R^2 = 0.742; \text{Adjusted } R^2 = 0.70; \text{SE} = 15.50\]

The multiple regression equation is being analyzed with standardized co-efficient and it is understood that the variable familiarity of software had the higher level influence over other. It indicates that one unit of change in this variable makes a change of 0.797 units on the dependent variable i.e software consumption. The other variable having significant impact on dependent variable is personal factor (0.089 units).

### 6.3 Determinants of software consumption in North zone

In North zone there are eight independent variables including software familiarity determine software consumption. The relationship between independent variables identified through exploratory factor analysis are personal factor, status factor, nature of the software, financial status, monthly income, purchase practice, miscellaneous and software familiarity. The level of influence of the independent factors on the dependent factor as measured through multiple regression analysis is presented below.

\[
Y = 9.714b_0 + 0.906b_1 - 0.073b_2 - 0.045b_3 + 0.013b_4 + 0.077b_5 + 0.090b_6 + 0.014b_7 - 0.036b_8
\]

Where,

\[b_0\text{-Constant, } b_1\text{-Software familiarity, } b_2\text{-Personal factor, } b_3\text{-Status factor, } b_4\text{-Nature of the software, } b_5\text{-Financial status, } b_6\text{-Monthly income, } b_7\text{-Purchase practice, } b_8\text{-Miscellaneous.}\]

\[R = 0.957; R^2 = 0.916; \text{Adjusted } R^2 = 0.898; \text{SE} = 6.15\]
It is very clear from the results of analysis of multiple regression equation with standardized co-efficient that the familiarity of software had a higher level influence over the other. It indicates that one unit of change in this variable makes a change of 0.906 units on the dependent variable i.e. software consumption. The other variable having significant impact on dependent variable is monthly income (0.090 units).

6.4 Determinants of software consumption East Zone

In East zone there are nine independent variables including software familiarity determine software consumption. The independent variables are personal factor, monthly income, status factor, financial status, status in family, prices of software, nature of the software, miscellaneous and software familiarity. The relationship between independent factors and the dependent factor tested through multiple regression analysis is given below.

\[ Y = -30.652b_0 + 0.721b_1 + 0.321b_2 + 0.278b_3 + 0.247b_4 - 0.052b_5 + 0.252b_6 - 0.080b_7 + 0.064b_8 - 0.004b_9 \]

Where,
- \( b_0 \): Constant
- \( b_1 \): Software familiarity
- \( b_2 \): Personal factor
- \( b_3 \): Monthly income
- \( b_4 \): Financial status
- \( b_5 \): Status factor
- \( b_6 \): Family system
- \( b_7 \): Nature of the software
- \( b_8 \): Miscellaneous

\[ R = 0.773 \; ; \; R^2 = 0.597 \; ; \; \text{Adjusted } R^2 = 0.535; \; \text{SE} = 19.96 \]

While analyzing the multiple regression equation with standardized co-efficient, it is clear that the variable, familiarity of software had the higher level influence over the other. It indicates that one unit of change in this variable makes a change of 0.671 units on the dependent variable i.e. software consumption. The other variables having significant influence on dependent variable are Personal factor (0.215), Monthly income (0.147), Family system (0.126) and Nature of the software (0.128).

7. Findings

It is necessary for every consumer to have knowledge about software. There is no necessity that the familiarity of software should be in the same level. The level of familiarity is varying from zone to zone in different angles. Other than software familiarity, certain other variables have been identified as influencing factors of software consumption. The relationship between familiarity on software and software consumption has been studied through Co-efficient of correlation, Co-efficient of determination and ‘t’ test.

- The familiarities on various eight category of software have relationship with their consumption in Tamil Nadu. Regarding the level of familiarity on eight softwares and their consumption, it is found that in Tamil Nadu, there is a relationship of 63.8 per cent.
- Individually South and North zone software consumers have registered a remarkable percentage of 73.4 and 88.5 per cent of relationship between software familiarity and software consumption.

As regards the familiarity in operating system, there is a 56.4 per cent relationship. Out of curiosity in playing games, video and hearing of audio software, maximum of consumers (68.5 per cent) consume directly without the knowledge of such software. As a highest, 75 per cent of North zone consumers have been influenced by familiarity in special application software. Regarding office
automation, the maximum of 67.9 per cent of consumption is made out of familiarity of such software. The South zone is the only maximum familiar zone with regard to consumption of general purpose software among four zones. The familiarity of browsing software is moderately influencing their consumption with regard to South, North, and West zone. Individually South zone consumers of communication have a top share of 75.7 per cent of familiarity. Only 24.3 per cent of consumers from South zone have been influenced by other factors. The level of familiarity of South, East and West zone consumers are 46.8 per cent, 39.2 per cent and 54.2 per cent respectively.

7.1 DETERMINANT FACTORS

Among the several independent variables influencing software consumption, software familiarity is the significant variable. It is found in the study that all independent variables found in Tamil Nadu have an influence of 64 per cent on software consumption. From further analysis through multiple regression, it is found that familiarity of software has influenced at a high level over the other variables. i.e., one unit of the variable familiarity software makes a change of 0.751 unit of the variable. Similarly the level of influence of the independent factors on software consumption in different regions reveal that in all zones software familiarity leads other factors on the influencing role.

8. CONCLUSION

The study on influence of software familiarity consumers over the software consumption has identified the relationship between software familiarity and software consumption in different zones in Tamil Nadu. The perfect positive relationship identified made the researcher to further probe the level of influence of the variable software familiarity over other variables on software consumption. Invariably in all zones, multiple regression shows that software familiarity has a higher level of influence on software consumption. The level of consumption and familiarity has been studied among different zones on the basis of socio-economic variables and other factors. The nature of dependent and independent variables are changed from zone and consumer. In overall Tamil Nadu, the researcher has found that the maximum of software consumption is based on software familiarity rather than other socio-economic variables and factors. The change among variables and factors will not be considered as constant forever.

References: