xIlkogretim Online - Elementary Education Online,2021; Vol 20 (Issue 5): pp.3054-3062
http://ilkogretim-online.org
doi: 10.17051/ilkonline.2021.05.330

Rural society decision construction for FMCG (Toothpaste) decision: A decision rule perceptive

Suraj Verma, Phd. Scholar, Shoolini University, Department of management sciences and liberal arts, Suraj1verma10@gmail.com
Kuldeep Chand Rojhe, Professor, Director MBA, Shoolini University, Department of management sciences and liberal arts, Kuldeeprojhe@shooliniuniversity.com

Abstract- Decision rule is a procedure by which the subjective information is processed in order to reach at a choice. The focus of the research is to know the association between decision making rules used by rural folks and demographic profile of individuals i.e. age, income, education and nature of family prior purchasing FMCG (Toothpaste).Study determine that there is association between demographic variables and decision making rules used by rural consumers. It can be established from examination that variation in age, income, education and nature of family of rural people will have impact on how these consumers use decision making rules. However, pattern can also be grasped from the investigation that utmost of rural consumers uses solitary three decision making rules those are simple summated, weighted summated, lexicographic. Moreover, it was also established in investigation that there were rare rural folks who did not use any decision rule instead used decision heuristic to reach to a conclusion while buying toothpaste. Furthermore, rural consumers frequently use simple summated rules which also conveys the inference that rural folks do not think in multifaceted manner while making verdict to purchase a toothpaste.

Key words: Decision rules, Simple summated, weighted summated and lexicographic

I. INTRODUCTION

The strategies folks use when making buying decisions has been studied for long by psychologists, marketers and economists, but there is still disagreement about consumer'sdecision making rules (Zellman and Blake, 2010). However, research propounds that when consumer captivates with the marketplacethey display moderately stable decision making styles by engaging certain procuring strategies and rules to guide their decision making (Bakewell and Mitchell, 2004). Although, most unescapable and significant postulation in consumer behaviour research is that purchases are preceded by a decision process (Olshavsky and Granbois, 1979).Consumer behaviour of individual decision maker is the result of his idiosyncratic evaluations of the attribute magnitude of the alternatives, united into inclusive evaluation of each alternative (Timmermans and Timmermans, 1980). Whereas, human decision cannot be understood merely by reviewing ultimate decisions. If we want to clinch an adequate understanding of human decision making, we must focus our learning on perceptual, emotional and cognitive process which eventually lead to choice of decision alternative (Sevenson, 1979). Likewise, patterns of decision making in individuals deviates from economically coherent expectations. These include distorted believe about external events, inconsistent preferences that are altered by past experience and current context and apparent violations of the axioms of rational choice theory (Fawcett et. al., 2014). However, some decision makers use simple heuristics when making judgements (Herve and Mellet, 2009).

Decision making of consumers

Consumer decision making have become eminent study topic in the numerous fields of consumer science in contemporary years (Ercmus, Boshoff and Rousseau, 2001). Consumer decision making refers to mental orientation or approach a consumer has towards making selections. Although, purchaser decision making characterize a consistent pattern of cognitive and affective responses (Leo, Benett and Hartel, 2005). Consumerspersistently make decisions concerning the selection, purchase and use of products and services. These decisions are of great significance not only to customers themselves, but also for the marketers (Bettman, Johnson and Payne, 1991). Most purchasing decisions of consumers are rational but

occasional decisions are not perfectly rational because they are influenced by multitude of factors which might limit them to act irrationally (Sirakaya and Woodside,2005). There was alternate view given to decision making by (Hoyer, 1984) that when purchase decision is preceded by a choice process it is likely to be very limited. This notion assumes that foremost aim in repetitive and reasonably unimportant is not to make an ideal choice but rather to make a satisfactory choice though minimising cognitive effort.

Decision rules

Decision rule is a procedure by which the subjective information is processed in order to reach at a choice (Timmermans, 1983).Still, individuals adapt decision making strategies to specific situations and setting. It can also be defined as cognitive misers, which strive to reduce the amount of cognitive effort associated with decision making (Habul and Trifts, 2000). Moreover, study of non-conscious stimuluses on consumer decision making seems specifically auspicious for the grounds of providing information that could help to adjust marketing to the requirements and processing aptitude of the consumers (Nordfalt, 2005). However, emphasis on consumer decision making may result in focusing on narrow set of factors impelling shopper buying which focuses on only tangible aspects of buying. For this reason, additional perspectives on consumer decision making rules is obligatory (Mowen,1998). Decision rules can be classified as (i) compensatory decision rule -which is further distinguished into (a)simple summated and (b)weighted summated rule. (ii) Non-compensatory rules – which is auxiliary classified into (a) conjunctive (b) disjunctive (c) lexicographic (d) elimination by aspects (Verma and Rojhe, 2018). (i) Compensatory decision rule involves the trade-offs by balancing a low value on some evaluative criterion against a high value on another criterion (Gudigantala, 2014). (a) In simple summated rule attributes or evaluative criteria are simply rated and scores are totalled in the end (Loudon, David, and Bitta, 2002), (b) While lobbying weighted summated rule, attributes are given rank; subsequently, attributes are graded and lastly scored after multiplication with weights; weights are then totalled (Batra and Kazmi, 2004). (ii) Non compensatory rules do not confess trade-offs amongst the applicable characteristics of the choice substitutes as they assume decisions are made on an attribute-by-attribute basis and that the distinct utilities are not united into a solitaryefficacy value(Timmermans, 1983).(a) The conjunctive decision rule desires the choice maker to stipulate a set of criterion standards on the attributes which a preferred alternative must be equal to or surpass. If an alternative does not meet the criterion on just one attribute, the alternative is plunged from the list of residualprobable alternatives (Sevenson, 1979).(b) Disjunctive rule sets cut-off level to only the criteria that purchaser ponders are vital. Solitary the alternatives meeting or exceeding such thresholds are considered(Gudigantala, 2014). (c) Lexicographic decision rule adopts that decision making proceeds chronologically. In this rule criterions are first ranked on the basis of importance, if the single criterion exhibits the highest score it will be chosen. However, in case of tie next most important criterion is selected, this process continues until choice in completed (Elrod, Johnson, White, 2004). (d) The elimination by aspects decision rule involves the purchaser to initiate a cut off theme for each criterion and rank the criteria in terms of their prominence. The brands that do not surpass the cut-off point are unconfined from supplementary deliberation(Verma and Rojhe, 2018).

Decision heuristic

Kahneman and Tversky several years ago introduced heuristics as the program of research on judgement under uncertainty (Devetag, 1999). Heuristics are techniques for systematically simplifying the quest through the existing information about a problem (Kahle et.al., 2000). Inhuman decision making there is a prominent role of simplification, as decision maker tries to make his/her task easier and functional (Shocker et. al., 1991). When choosing what services and what products to buy, people often think they are making elegant decisions and behaving in the ways that are highly rational with their ethics and intentions. However, daily life illustrates that often it is not the case and individuals customarily diverge from the rational choice model of human behaviour, in which one objectively weighs up the cost and benefits all the alternatives before choosing the optimal course of action (Frederiks, Stenner and Hobman, 2015). Study by Yoon, Cole and Lee (2009) found that decision heuristics differed between age groups, as older folks tends to adopt a strategy of eliminating alternatives as soon as possible. Elements of heuristics may exist in memory, if customer had pastinvolvement with a specific choice, and if used over period such elements may become organised into general rule (Bettman and Zins, 1977).

II. LITERATURE REVIEW

Macdonald (1994) examined consumer's decision making through content analysis in a comparative study between U.S. and Germany. Authorsdetermined that popular decision making paradigms can be used to engage consumers in a dialogue about their decision making and additionally the study shows that consumers thought process and behaviour can be analysed through analysing the characteristics of consumers. (Walsh, Mitchell and Thurau, 2001) in a study on German decision making styles measured decision making of consumers through eight mental characteristics: price value consciousness, brand consciousness, perfectionism, novelty fashion consciousness, recreational, impulsiveness, brand loyal/habitual and confused by over choice. In alternative study by Montgomery (1983) in quest to find decision rules and search for dominance structures: towards a process model of decision making found the number of problems allied associated with compensatory and non-compensatory rules. Researcher, however suggested in his study that problems could be escaped if the rule are seen as operators in a search of dominance structures.

(Sadler, 1989) explored lexicographic rules in context to selection of higher education. Studied was carried out in Queensland based on what is known in decision theory as lexicographic ordering. Conclusion was carried out by investigator that lexicographic rules are unfitting in its traditional design as a technique for selecting higher education.However, study on evaluation of decision rules for tourist's choice processing was carried out by (Li, McCable and Song, 2016). Analyst paralleled two decision rules non-compensatory lexicographic rule and compensatory weighted additive rule in context to tourism. Although sample accuracy was low,conclusion was drawn with the help of greedoid analysis that lexicographic rules have better expounding performance on respondent's performance command as compared to weighted additive rules. Gilbride and Allenby, 2004 experimented a choice model with conjunctive, disjunctive and compensatory screening rules. Experimenters examined consumers use of screening rules as a part of a discreet choice model. Conclusion was drawn by analyst that most of respondent's screen alternatives on at least solitary or additional attributes.

Tversky, 1972 studied a theory of choice through decision rule of elimination by aspects. Researcher explains through his paper that while selection of product by consumer each substitute is regarded as set of aspects. At each stage in the progression an aspect is selected, and all the alternative that do not contain the selected aspect are eradicated. The process lingers until single alternative remains.In addition, Manrai and Sinha, 1989 studied alteration between elimination by cut-offs (EBA) and multinomial logit model (IML). Essayists explain in their research that EBA model directly expresses information about efficacies of objects and resemblanceamongst objects unlike IML model.

Objective of the research

Main objective of the research is to know the association between decision making rules used by rural folks and demographic profile of individuals i.e. age, income, education and nature of family prior purchasing FMCG (Toothpaste).

Research method

The study was carried out in rural areas of Himachal Pradesh, India.Himachal Pradesh is the country of orchards and is natures paradise, which has got a lot of potential for the rural market as 90 % of Himachali population lives in the rural areas. This state comprised of twelve districts: Bilaspur, Chamba, Hamirpur, Kangra, Kinnaur, Kullu, Lahul and Spiti, Mandi, Shimla, Sirmaur, Solan and Una. Rural area of Himachal Pradesh is spread over all twelve districts. All people residing in rural areas who take decision those purchase Toothpaste in Himachal Pradesh constituted the study population. This study is only based on primary data. The data for this study was collected from 12 districts in Himachal Pradesh from rural settlements. To qualify for the study, the community was needed to qualify on three criteria's a) minimum population of 5000, b) (b) at least 75% of male workforce engaged in non- agricultural activities, and (c) a population density of over 400 persons per square kilometre (Census, 2011)**.**In present study, multistage proportionate sampling technique was used for data collection. First, list was created of number of villages in each tehsil in each district. Tehsil with most number of villages was selected for the study. In next step, each district was divided into these three clusters of small, medium and large villages. Villages below population of 500 were considered as small, villages between population of 500 – 999 were considered as medium and villages between population of 1000 to 5000 were considered as large. From each cluster of small, medium and large; village which had top population

was selected for the study. Data from each district was collected in proportion to the rural population in the district. From each cluster of village selected for study, equal number of respondents were selected from each selected village. From each selected village male and female respondents were also selected according to the proportion of male and female ratio in the district according to the census data of government of India.

III. ANALYSIS

Decision making rules of consumers depend upon several demographic variables such as age, income, education and nature of family. The investigators have tried to analyse the significant relation of these demographic variables with decision making rules used by the rural consumers with the supportof chi square test.

Variation of decision making rules with demographics

Variation with age

Ho: There is no significant association between age of respondents and decision making rules used

Table 1 demonstrates that consumers between the age group of 18-31 year's mostly uses i.e.35% lexicographic rules but if we see from overall point of view of decision rules disjunctive rule is frequently used i.e. 49%. Weighted summated and conjunctive rules were least used by this age group. Rural folks from age group between 32-46 regularly used simple summated rule i.e. 40% but if we see from point of view from within decision making rules conjunctive rule was often used i.e.80%. Consumers with age between 47-60 regularly used simple summated rule within age and within decision rules i.e. 41.5% and 20.2% respectively. People Above 61 years used weighted summated rule within age and within decision rule i.e. 33.3% and 7.5% respectively. Furthermore, research observed that habitually individuals with in age group of 47-60 used decision heuristics rather than any decision rule.

Table -1

Age	Simple summated	Weighted summated	Conjunctive	Disjunctive	Lexicographic	EBA	Didn't use	Total
18-31	15	5	5	25	36	16	1	103
% with in age	14.6%	4.9%	4.9%	24.3%	35.0%	15.5%	1.0%	100.0%
%with in DR	7.8%	6.2%	20.0%	49.0%	27.1%	48.5%	2.9%	18.7%
32-46	134	56	20	24	79	12	10	335
% with in age	40.0%	16.7%	6.0%	7.2%	23.6%	3.6%	3.0%	100.0%
% with in DR	69.4%	70.0%	80.0%	47.1%	59.4%	36.4%	28.6%	60.9%
47-60	39	13	0	2	18	3	19	94
%with in age	41.5%	13.8%	0.0%	2.1%	19.1%	3.2%	20.2%	100.0%
% with in DR	20.2%	16.2%	0.0%	3.9%	13.5%	9.1%	54.3%	17.1%
61+	5	6	0	0	0	2	5	18
% within age	27.8%	33.3%	0.0%	0.0%	0.0%	11.1%	27.8%	100.0%
% with in DR	2.6%	7.5%	0.0%	0.0%	0.0%	6.1%	14.3%	3.3%
Total	193	80	25	51	133	33	35	550
% with	35.1%	14.5%	4.5%	9.3%	24.2%	6.0%	6.4%	100.0%

in age								
% with in DR	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 1.1exhibits Chi-Square test statistics of 151.46 (Significance value < 0.05) shows our null hypothesis is not accepted indicates that there is association between age and decision making rules used by rural people for buying Toothpaste. Our null hypothesis is not accepted because significance value is .000 which is less than 0.05 at 95% confidence level.

Table 1.1(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	151.460[a]	18	.000
Likelihood Ratio	144.730	18	.000
Linear-by-Linear Association	3.973	1	.046
N of Valid Cases	550		

Variation with Income

Ho: There is no significant association between income of respondents and decision making rules used

Table 2 exhibits that people with lower income less than rupees 2,25,000 frequently use simple summated decision making rule i.e. is 41.4% and if we perceive with in decision making rules percentage spirits up to 78.2%. Income group between 2,25,000 to 4,49,999 rural consumers generally use lexicographic rules followed by simple summated and disjunctive rules. If we see with in decision making rules most consumers go for elimination by aspect rule followed by disjunctive and lexicographic rule i.e. 63.6%, 60.8% and 43.6% respectively. Our study was focused on rural areas, therefore respondents above earnings of rupee 4,50,000 were fewer in our research. Solitary, buyers less than income of rupee 2,25,000 used decision heuristics prior buying toothpaste.

Table 2

Income (Rupees)	Simple summated	Weighted summated	Conjunctive	Disjunctive	Lexicographic	EBA	Didn't use	Total
0-224999	151	56	19	19	73	12	35	365
% within Income	41.4%	15.3%	5.2%	5.2%	20.0%	3.3%	9.6%	100.0%
% with in DR	78.2%	70.0%	76.0%	37.3%	54.9%	36.4%	100.0%	66.4%
225000 - 449999	40	22	6	31	58	21	0	178
% with in Income	22.5%	12.4%	3.4%	17.4%	32.6%	11.8%	0.0%	100.0%
% with in DR	20.7%	27.5%	24.0%	60.8%	43.6%	63.6%	0.0%	32.4%
450000 – 674999	2	1	0	1	2	0	0	6
%within Income	33.3%	16.7%	0.0%	16.7%	33.3%	0.0%	0.0%	100.0%
% with in DR	1.0%	1.2%	0.0%	2.0%	1.5%	0.0%	0.0%	1.1%
675000+	0	1	0	0	0	0	0	1
% with in age	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
% with in DR	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Total	193	80	25	51	133	33	35	550

%within age	35.1%	14.5%	4.5%	9.3%	24.2%	6.0%	6.4%	100.0%
% with in DR	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 2.1 unveils Chi-Square test statistics of 80.106 (Significance value < 0.05) shows our null hypothesis is not accepted. It specifies that there is association between income and decision making rules used by rural people intended for purchasing Toothpaste. Our null hypothesis is not accepted since significance value is .000 which is less than 0.05 at 95% confidence level.

Table 2.1(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80.106[a]	18	.000
Likelihood Ratio	87.485	18	.000
Linear-by-Linear Association	9.070	1	.003
N of Valid Cases	550		

Variation with education

Ho: There is no significant association between education of respondents and decision making rules used

Table 3 illustrates how people with different education qualification use decision making rules. Rural individuals whose education background is below 10th frequently use summated rules i.e. 44% but if we see within decision rules than weighted summated rules is typically used i.e. 25%. Consumer those have qualified 10th standard education also follows same pattern of using decision rules as consumers who are qualified below 10th. Shoppers who are 12th pass mostly use lexicographic rules followed by simple summated rules i.e. 31.8 and 28.3% respectively. But if we see from point of view of decision making rules consumers use conjunctive rule followed bydisjunctive and lexicographic rule i.e. 72%, 58.8% and 47.4% respectively. Rural folks those are graduates generally use lexicographic rule i.e. 43.5%, if we see with in decision making rules than we find disjunctive rule is frequently used. Moreover, our study did not cover people those were post-graduates. Furthermore, study shows that rural people who have informal education use simple summated rules. However, decision heuristics are only used by people those have education qualification below 10th and informal education.

Table 3

Education	Simple summated	Weighted summated	Conjunctive	Disjunctive	Lexicographic	EBA	Didn't use	Total
Below 10th	37	20	2	2	7	2	14	84
% with in education.	44.0%	23.8%	2.4%	2.4%	8.3%	2.4%	16.7%	100.0%
% with in DR	19.2%	25.0%	8.0%	3.9%	5.3%	6.1%	40.0%	15.3%
10th	69	45	2	3	23	3	4	149
% with in education	46.3%	30.2%	1.3%	2.0%	15.4%	2.0%	2.7%	100.0%
% with in DR	35.8%	56.2%	8.0%	5.9%	17.3%	9.1%	11.4%	27.1%
12th	56	10	18	30	63	15	6	198
%within education	28.3%	5.1%	9.1%	15.2%	31.8%	7.6%	3.0%	100.0%
%with in DR	29.0%	12.5%	72.0%	58.8%	47.4%	45.5%	17.1%	36.0%
Graduation	16	3	3	16	37	10	0	85
%within education	18.8%	3.5%	3.5%	18.8%	43.5%	11.8%	0.0%	100.0%
% within	8.3%	3.8%	12.0%	31.4%	27.8%	30.3%	0.0%	15.5%

DR								
Post-Grad.	0	1	0	0	1	3	0	5
% within education	0.0%	20.0%	0.0%	0.0%	20.0%	60.0%	0.0%	100.0%
% with in DR	0.0%	1.2%	0.0%	0.0%	0.8%	9.1%	0.0%	0.9%
Informal education	15	1	0	0	2	0	11	29
% within education	51.7%	3.4%	0.0%	0.0%	6.9%	0.0%	37.9%	100.0%
% with in DR	7.8%	1.2%	0.0%	0.0%	1.5%	0.0%	31.4%	5.3%
Total	193	80	25	51	133	33	35	550
% within education	35.1%	14.5%	4.5%	9.3%	24.2%	6.0%	6.4%	100.0%
% within DR	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.1 discloses chi-Square test statistics of 263.063 (Significance value < 0.05) shows our null hypothesis is not accepted. It postulates that there is association between education background of rural folks and decision making rules used by rural people intentional for purchasing Toothpaste. Our null hypothesis is not accepted since significance value is .000 which is less than 0.05 at 95% confidence level.

Table 3.1(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	263.063[a]	30	.000
Likelihood Ratio	241.284	30	.000
Linear-by-Linear Association	30.013	1	.000
N of Valid Cases	550		

Variation with nature of family

Ho: There is no significant association between nature of family of respondents and decision making rules used

Table 4 exemplifies that stereotypically rural people use to live in joint family on the other hand nowadays folks elect to live in nuclear family's. Countryside individuals living in joint families prefer to use simple summated rules followed by lexicographic and weighted summated rules i.e. 44.3%, 18.8% and 18.1% respectively. Within decision making rules in joint families individuals typically use simple summated rule i.e. 34.2%, followed by weighted summated i.e. 33.8%, and lexicographic rule i.e. 21.1%. Countryside folks living in joint families also prefer to use simple summated rule followed by lexicographic and weighted summated rule. Nevertheless, if we perceive within decision making rule folks use conjunctive rule, shadowed by elimination by aspect's rule besides lexicographic rule i.e. 92%, 87.9% and 78.9% correspondingly. Moreover, 8.7% rural individuals those belong to joint family and 5.5% individuals those belong to nuclear family used decision heuristics while purchasing toothpaste.

Table 4

Nature of Family	Simple summated	Weighted summated	Conjunctive	Disjunctive	Lexicographic	EBA	Didn't use	Total
Joint	66	27	2	9	28	4	13	149
% with in family	44.3%	18.1%	1.3%	6.0%	18.8%	2.7%	8.7%	100.0%
%with in DR	34.2%	33.8%	8.0%	17.6%	21.1%	12.1%	37.1%	27.1%

Nuclear	127	53	23	42	105	29	22	401
% with in family	31.7%	13.2%	5.7%	10.5%	26.2%	7.2%	5.5%	100.0%
% with in DR	65.8%	66.2%	92.0%	82.4%	78.9%	87.9%	62.9%	72.9%
Total	193	80	25	51	133	33	35	550
%with in family	35.1%	14.5%	4.5%	9.3%	24.2%	6.0%	6.4%	100.0%
% with in DR	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table4.1 reveals chi-Square test statistics of 21.635 (Significance value < 0.05) shows our null hypothesis is not accepted. It hypothesizes that there is association between nature of family of rural people and decision making rules used by rural people intended for purchasing Toothpaste. Our null hypothesis is not accepted since significance value is .001 which is less than 0.05 at 95% confidence level.

Table 4.1(Chi-Square Tests)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.635[a]	6	.001
Likelihood Ratio	23.415	6	.001
Linear-by-Linear Association	6.563	1	.010
N of Valid Cases	550		

IV. CONCLUSION

When rural folks make decision regarding purchase of toothpaste it is not only of great prominence to buyers but also to marketers. Customers are repeatedly confronted with enormous amount of substitutes which are continuously shifting due to innovative technology and competitive pressure.Therefore, it is necessary for marketers to know unconscious decision making process of consumer's. This research focus on how consumers use decision making rules before buying toothpaste. Main objective of the research is to know the association between decision making rules used by rural folks and demographic profile of individuals i.e. age, income, education and nature of family prior purchasing FMCG (Toothpaste). Study determine that there is association between demographic variables and decision making rules used by rural consumers. It can be concluded from examination that variation in age, income, education and nature of family of rural people will have impact on how these consumers use decision making rules. However, pattern can also be grasped from the investigation that utmost of rural consumers uses solitary three decision making rules those are simple summated, weighted summated, lexicographic. Moreover, it was also established in exploration that there were few rural people who did not use any decision rule instead used decision heuristic to reach to a conclusion while buying toothpaste. Furthermore, rural consumers frequently use simple summated rules which also conveys the inference that rural folks do not think in multifaceted manner while making verdict to purchase a toothpaste. In conclusion inference can be prepared that there is an association between decision making rules used by rural folks while purchasing toothpaste and demographic profile of rural folks.

REFERENCES

1. Bakewell, C., Mitchell, V. (2004). Male consumer decision making styles. *International review of retail, distribution and consumer research.* 14(2), 223-240.
2. Batra, Kazmi. (2004). Consumer Behaviour. New Delhi: Excel books.
3. Bettman, J., Johnson, E., Payne, J. (1991). Consumer decision making. *Consumer decision making.* 50-79.
4. Bettman, J., Zins, M. (1977). Constructive process in consumer choice. *Journal of consumer research.* 4(2), 75-85.

5. Devetag, M., (1999). From utilities to mental models: A critical survey on decision rules and cognition in consumer choice. *Oxford university press.* 289-351.
6. Elrod, T., Johnson, R., White, J. (2004). A new A new integrated model of non -compensatory and compensatory decision strategies. *Organisational behaviour and human decision process.* 95, 1-19.
7. Erasmus, A., Boshoff, E., Rousseau, G. (2001). Consumer decision-making models within the discipline of consumer science: a critical approach.*Journal of Family Ecology and Consumer Sciences.* 29, 82-90.
8. Fawcett, T., Fallenstein, D., Houston, A., Mallpress, D., Trimmer, P., McNamara, J. (2014). The evolution of decision rules in complex environments. *Trends in cognitive sciences.* 8(3), 153-161.
9. Frederiks, E., Stenner, K., Hobman, E. (2015). Household energy use: Applying behavioural economics to understand consumer decision-making and behaviour. *Renewable and Sustainable Energy Reviews.* 41, 1385-1394.
10. Gudigantala, N. (2014). A study of compensatory and non-compensatory decisions. *Journal of applied business and economics.* 16(1), 74-83.
11. Habul, G., Trifts, V. (2000). Consumer Decision Making in Online Shopping Environments: The Effects of Interactive Decision Aids. *Marketing science.* 19(1), 4-21.
12. Hoyer W. (1984). An examination of consumer decision making for a common repeat purchase. *Journal of consumer research.* 11(13), 822-289.
13. Kahle, L., Liu, R., Rose, G., Kim, W. (2000). Dialectical Thinking in Consumer Decision Making. *Journal of Consumer psychology.* 9 (1), 53-58.
14. Leo, C., Bennett, R., Hartel, C. (2005) Cross-Cultural Differences in Consumer Decision-Making Styles. *Cross cultural management.* 12, 32-62.
15. Li, C., McCabe, S., Song, H. (2016). Tourist choice processing: Evaluating decision rules and methods of their measurement. *Journal of travel research.* 1-13.
16. Loudon, David, and Bitta. (2002). Consumer behaviour. New Delhi: Tata McGraw hill edition private limited.
17. Montgomery, H. (1983). Decision rules and search for a dominance structure: Towards a process model of decision making. *Analysis and Aiding decision processes.* 343-369.
18. Mowen, J. (1998). Beyond consumer decision making. *Journal of consumer research.*5(1), 15-25.
19. Nordfalt, J. (2005). Is decision making out of control. *The economic research institute.* 15-112.
20. Olshavsky, R., Granbois. D. (1979). Consumer decision making fact or fiction. *The journal of consumer research.* 6, 93-100.
21. Saddler, D. (1989). Lexicographic decision rule and selection of higher education. *Journal of education.*33(2); 114-126.
22. Sevenson, O. (1979). Process description of decision making. *Organisational behaviour and human performance.*23, 86-112.
23. Shocker, A., Akiva, M., Boccara, B., Nedungadi, P. Consideration Set Influences on Consumer Decision-Making and Choice: Issues, Models, and Suggestions. *Marketing letters.* 2(3), 181-197.
24. Siriakaya, E., Woodside, A. (2005). Building and testing theories of decision making by travellers. *Tourism management.* 26, 815-832.
25. Svenson, O. (1979). Process description of decision making. *Organisational behaviour and human performance.* 23, 86-112.
26. Timmermans, H. (1983). Non- compensatory decision rules and consumer spatial choice behaviour: A test of predicative ability. 35(4), 449-445.
27. Timmermans, H., Timmermans, H. (1980). Unidimensional conjoint measurement models and consumer decision making. *The royal geographical society.* 12(4), 291-300.
28. Verma, S., Rojhe, K. (2018) Review of Evaluative Criteria used by Consumers Preceding Purchase Decisions of FMCGs (Fast Moving Consumer Goods). *NMIMS management review.* 3; 10-26.
29. Walsh, G., Mitchell, V., Thurau, T. (2001). German consumer decision making styles. *The journal of consumer affairs.* 35(1), 73-95.
30. Yoon, C., Cole, C., Lee, M. (2009). Consumer decision making and aging: Current knowledge and future directions. *Journal of Consumer Psychology.*19, 2-16.
31. Zellman, E., Blake, W. (2010). Identifying consumer decision-making strategies using alternative methods. *Qualitative Market Research: An International Journal.* 13(3), 271-286.
32. Gilbride, T., Allenby, G. (2004). A choice model with conjunctive, disjunctive, and compensatory screening rules. *Marketing science.* 23(3); 391-406.
33. Tversky, A. (1972). Elimination by aspects: A theory of choice. *Psychological review.* 74(3); 281-299.
34. Manrai, A., Sinha, P. (1989). Elimination by cut-offs. *Marketing science.* 8(2), 133-152.