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MAXIMISERS OR SATISFICERS? IRONY OF CHOICE AND DECISION PARALYSIS SYNDROME AMONG ADOLESCENTS IN KERALA

Tushar Soubhari
Research Scholar, DCMS, University of Calicut, Kerala, India.
https://orcid.org/0000-0002-9581-1855

Dr. Satheesh E.K.
Professor & Research Supervisor, DCMS, University of Calicut, Kerala, India.

Lineesh P
Assistant Professor, Department of Commerce
Jain (Deemed-to-be University), Kochi, India.
https://orcid.org/0000-0001-9582-5694

Dr. Niyaz Panakaje
Assistant Professor, Institute of Management and Commerce,
Srinivas University, Karnataka, India.
https://orcid.org/0000-0003-4568-1658

Dr Jency Treesa
Assistant Professor of Commerce
St Teresa's College (Autonomous) Ernakulam, Kerala, India.
https://orcid.org/ 0000-0003-4805-0456

Manu Antony
Assistant Professor of Commerce
St. Joseph's College, Devagiri (Autonomous), Calicut, Kerala, India.
https://orcid.org/0000-0002-2837-5141

Abstract:

Purpose- Adolescence is the life phase between childhood and adulthood (aging from 10 to 19, as defined by the World Health Organisation). It is a stage of Identity Crisis; pushed back by undefined status, increased pressures, irrational decisions, and the search for self. 'Making a choice' is what exhibits one's freedom and autonomy. It is axiomatic that a choice is good, but too many choices may confuse at times. Such a paralytic situation drowns the adolescents' thoughts to indecisiveness and experience a misery-induced-tyranny. Hence, this paper discusses on how adolescents take decisions out of informed choices from various life aspects; reasons for their decision paralysis and defence mechanisms they adopt to rationalise their decisions. The study highlights decision-making styles among adolescents as 'Maximisers' and 'Satisficers' (Simon, 1956). Maximisers tend to be perfectionists, describing moreover an

uncompromised and distressed approach to life. Satisficers opt for best possible choice, imparting happiness within themselves with what they opt.

Design/ Methodology-Primary data was collected based on the standardised 'Maximisation Scale', with thirteen items propounded by Barry Schwartz in 2002 along with borrowed concepts from the 'Desirability of Control Scale' derived from the studies of Burger, J. M., & Cooper, H. M. (1979). The new scale was developed and validated based on thirty-nine statements under three factors, namely High Standards, Alternative Search and Decision Difficulty measured on the five-point rating Likert scale. The sample size estimated for the study was 232 respondents amongst adolescents from the state of Kerala, India. Lottery method of sampling was adopted to collect samples from the total universe of adolescents in Kerala. Data was grouped classifying them based on gender- Male, Female and Transgenders.

Findings- As per most of the adolescence respondents tends to be 'maximisers' as the decision scores in these cases ranged from 71 to 117. Based on the objectives we found that adolescents take decisions out of informed choices from various life aspects. The analysis of data has been hypothesised and proved that their decision style is influenced by their demographical characteristics. It was also discovered that there is direct correlation between high design factors, alternative searches, and decision difficulty factors of adolescents.

Practical Implications: This paper provides practical insights on how adolescents take up decisions as 'maximisers' or 'satisficers' and how this stand leads them facing decision paralysis due to overchoice problem.

Originality/ Value- The paper is the first of its kind not ever published elsewhere and is original in nature.

Keywords- Adolescence, Maximisers, Satisficers, Choice, Decision Paralysis.

Paper Type- Analytical Research Paper.

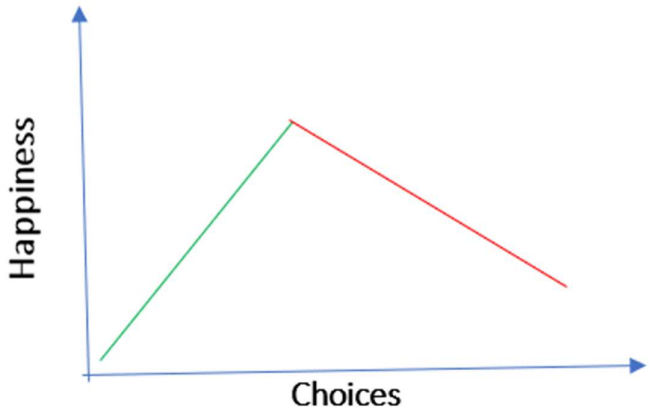
INTRODUCTION

Simon's (1957) Theory of Bounded Rationality stated that we are not inclined to find all necessary information that is required to make our decisions rational. This is because of our cognitive limits (decision difficulty to obtain and process all information required); imperfect information; time constraints; and social limits pertaining to personal and social ties among others. The rationality becomes more complex as and when individuals' optimal decisions don't match with the reality. Research suggests that different facets of peer-influence predict higher levels of risk tolerance among adolescents (Gardner and Steinberg, 2005). The World Health Organisation (WHO) defines Adolescents as "those falling to age category between 10 to 19 years of age". They are often characterized by undefined status, search for self with a sense of identity-crisis, aggressive decision making, increased pressures with volatile emotions and the quest to explore on new things. Studies conducted by the American Academy of Child and Adolescent Psychiatry (2022) reveal the findings that adolescents' brain work differently than adults while decisions being made to solve problems. This study supported the fact that their actions are guided more by their emotional and reactive amygdala, and less by their

thoughts and logical frontal cortex in brain. Making decisions might sound overwhelming sometimes due to many potential outcomes and risks resulting from their wrong choices. Having too many good options could prove fatal leading to mental drain and decision fatigue among adolescents. Overexcitement, excessive preparative thoughts, looking for perfectionism and the fear of making wrong decisions are certain reasons for decision paralysis. One of the most interesting aspects in decision making research is understanding the practicality in 'Maximising' versus 'Satisficing'. The word, 'Satisfice' was first coined by Herbert. A. Simon in 1955 to describe the strategy striving for adequacy rather than optimal decisions. The term, 'Maximising' involves a trade-off between spending resources and achieving a more optimal solution. Be it a maximiser or a satisficer, it can be seen as a special case of the reflection-impulsivity dimension (Messer, 1976; van Merrienboer & Jelsma, 1988). Based on Simon's works on decision theories since 1955 and 1957; Schwartz (2000) found that there are individual differences in degrees to which an individual is a 'maximiser' (looking for best possible solution) or a 'satisficer' (comforting with arrived outcomes and optimising decisions). Besides this, he argued that maximisers reduce their psychological wellbeing by ways of turning out their unforeseen options to be the best one than the latter. Moreover, they represented recipes of unhappiness with higher expectations and self-fulfilling fears of regret.

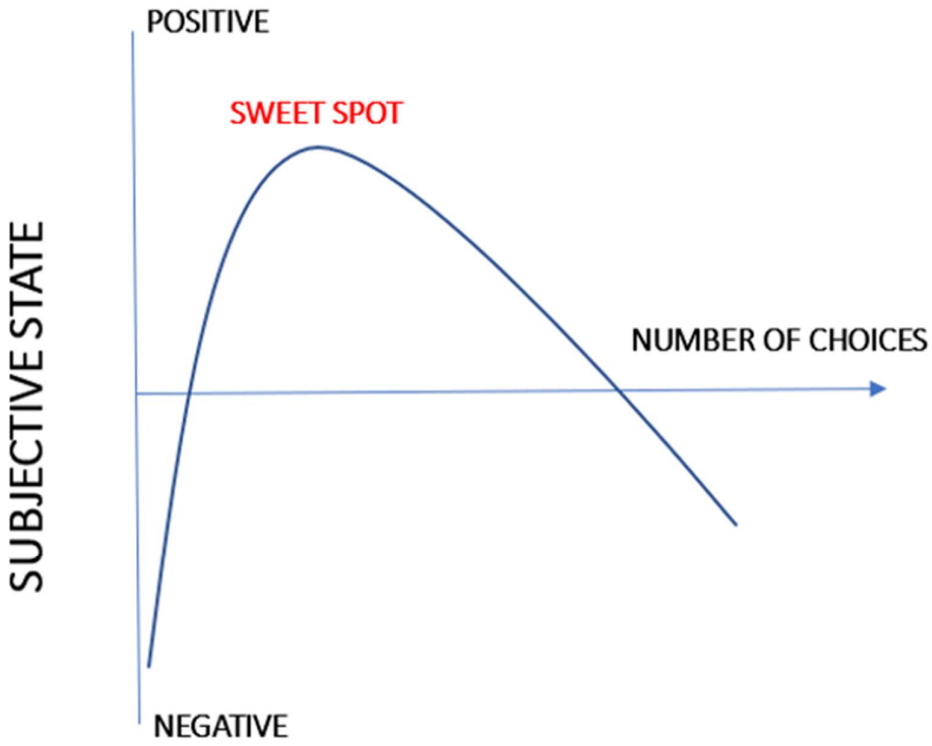
Schwartz et al. (2002) developed the 13-item Maximisation scale to examine the relationship between maximising tendencies, wellbeing, and their mental health. Further, in 2008; Nenkov, Morin, Ward, Schwartz and Hulland examined the factor structure of this scale based on three important variables, namely- "Alternative Search" (the desire to continue seeking for even better options), "Decision Difficulty" (the perceived difficulty to choose and make decisions) and "High Standards" (setting principles of high quality for performance and achievement). Results from studies by Schwartz et al. (2002) reported that Maximisers are less satisfied with life showing signs of more unhappiness, optimism, perfectionism, and deep sense of feeling regret and thereby, depression. Overchoice has been associated with unhappiness (Schwartz, 2004). Situations of overchoice leads to decision fatigue forming a default option hampering in further making of decisions all together; like restricting from buying a product or availing a service (Iyengar & Lepper, 2000). Chernev et al. (2015) suggested a few factors contributing to perceived choice overload including the number of options and attributes, time constraints, accountability, alignability and complementarity of options. Life in the modern world is quite challenging where alternatives proliferate and compete with one another. There is a stereotyped notion that more choices equal more freedom, which indeed is a good thing. But in fact, it's not true which was well understood from the empirical evidence proved by Barry Schwartz (2004) arguing that choice overload harms us. The effects of this bias go beyond complicating our decision-making process, which impacts our affective domain (emotions), decreasing our satisfaction with choices made and increasing the inner guilt. The implications of Choice overload are widely understood from the experiments conducted and discussed in the book written by Schwartz (2004)- The Paradox of Choice: Why More is Less. In this book, he outlines the steps to solve the paralytic difficulties of choice problems: (i) Figuring out one's goals (ii) Evaluating the importance of each goal (iii) Arraying the options based on how well they would meet each goal (iv) Evaluate on how likely each option meets one's goals (v) Finally, Picking up the best and winning option. Excerpts from the book mentions that if

anyone has to compare an item across fifty dimensions instead of three, then there could be a risk of missing the "sure one". Various studies have been conducted in Consumer Psychology to reflect the decision-making styles of consumers and proving this Choice Paradox that, more options drives customer considerations and with increased choices, the customers' happiness diminishes (evident from the figure below):



Source: The Paradox of Choice: Why More is Less (Schwartz, 2004) modified for they study

Simon (1957) categorised the decision-making styles under tow heads: Maximisers and Satisficers. Maximisers involve those who want to make the best possible solution. They are overthinkers and take longer time to research in all choices available and end up decision-paralytic towards the end. On the contrary, the satisficers are make decisions when once their criteria are met. They are good enough to decide the optimal choice and are ultimately satisfied with whatever decisions are made. The curse of too many options results in Anxiety and Disappointment. If this is the reality, then do you think that the best option to drive away this paralysis is to have no choices at all? Obviously, the answer is No! Schwartz has cleverly discovered the point where the number of choices becomes more effective at par with the respondents' subjective wellbeing, which he termed as "The Sweet Spot". For a better visual display, the point is depicted in the following figure:



Source: "The Sweet Spot" (Schwartz, 2006) modified for the study

As per the figure shown above, the spot was derived based on the hypothesis stated by Schwartz (2004) that more choice means better options and greater satisfaction. However, every decisions have been getting more complicated due to overwhelming abundance of choices. Through this study, he suggested to beware of excessive choices since choice overload could unrealistically increase one's expectations; further leading to decision paralysis, anxiety and perpetual stress. He characterized maximisers from satisficers as being more engaged in overthinking, taking longer time to decide, looking for perfect outcomes, with the sense of experiencing regrets after taking decisions than the latter. One of the key outcomes of competition in the real world is choice, which is supposed to afford the freedom at the heart of rational decision making. Schwartz's works based on the pioneering research conducted by Columbia Business School Professor Sheena Iyengar, who consistently questioned the notion that more choices make better decisions, but finally suggested that a few choices could only lead to better decision-making. In the mainstream, this is what Economists term as "Hogwash".

The developmental phase of adolescents is very relevant for studying about their decision-making competence. Some of their struggles in making decisions include career choice, academic problems, relationship issues, peer-pressure, depression, identity crisis, quest for novelty, stubbornness in actions, sexual activities, alcohol and drugs, exploring on unexplored activities, freedom of choice, lack of self-esteem, body image, cyberbullying, and so on. All these have relevant impact on their whole life as an individual (Tuinstra, Sonderen, Groothoff,

van den Heuvel, & Post, 2000). Decision-making engages cognitive processes involving information gathering and processing, problem-solving, judgement, memory and learning. Studies by Mann, Harmoni and Power (1989) and, Miller and Byrnes (2001) demonstrated a better personal control and choice responsibilities, identifying the range for risks and benefits. It was evident from the study that adolescents by the age of fifteen articulate the ability to make correct choices; enhanced with creative problem-solving capacity. One in every five students from the age group of 12 to 19 years, suffer from decision fatigue and psychological distress; as reported by the Department of Psychiatry, Amrita Institute of Medical Sciences, Kerala, India in 2022. Besides this the Psychiatrists in Kerala reported that the number of adolescents using stress-coping mechanisms like unwanted substance uses is also increasing; namely, the prevalence of alcohol among adolescents is found to 15% (23% in boys and 7% in girls). The decisions taken by adolescents are moreover risky and impulsive. The effect of the Choice Paradox is felt while experiencing adolescence's remorse towards decision paralysis in the state of Kerala. They have also been symptomizing the 'Fear of Missing out' (FOMO) coined by Patrick McGinnis in 2004 and the 'Fear of Better Options' (FOBO) coined by Dan Herman in 1996. Seeing posts from friends or peers during an outing via social media could trigger self-doubts causing low self-esteem in adolescents. Such psychological dependence on social media could make them susceptible to FOMO. A social phenomenon seen in adolescents driving an instinct of low aversion in them creates the 'Fear of Better Options'; also termed as "Maximisation". Such situations of social anxiety paramounts to an attitude of indecisiveness among them. Overspending in ecommerce platforms create scarcity of money creating financial distress among adolescents; indeed, causing FOBO. Hence, this paper aims to identify the reasons for choice overload among adolescents in Kerala and its impact on decision paralysis. For a better understanding on their decision-making styles, the study classifies them as 'maximisers' and 'satisficers'. Besides which, their decision styles have been evaluated based on the three important variables: High Standards, Decision Difficulty and Alternative Search. These objectives were framed to answer some research questions formulated: (i) Who are Maximisers and Satisficers? (ii) Who does Overthinking the most? Maximisers or Satisficers? (iii) What is the connecting link between Overthinking and Decision Paralysis? (iv) What are the reasons behind Choice Overload? (v) How does Choice Overload result in Decision Paralysis? (vi) Who faces problems of Choice Overload and Decision Paralysis the most? Is it the Maximiser or the Satisficer? (vii) What are the contributing factors being studied to evaluate the decision-making styles of maximisers or satisficers? Based on the aforesaid objectives, the following hypotheses were constructed:

H_{11}: There is a significant difference in the Decision-making styles of Adolescents based on Gender.

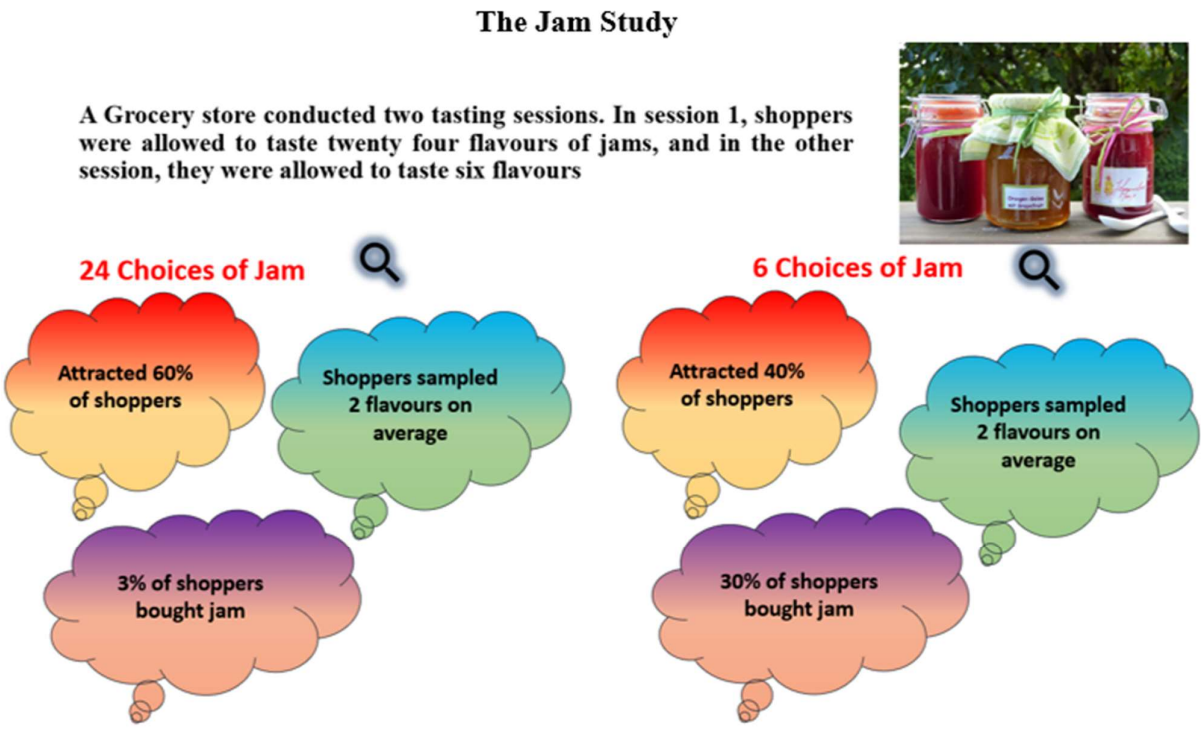
H_{12}: High Standards, Alternative Search and Decision Difficulty will have significant impact on Choice Overload and Decision Paralysis.

H_{13}: Factors contributing to decision-making styles are correlated to each other.

H_{14}: Decision Paralysis depends on Choice Overload, High Standards, Alternative Search and Decision Difficulty of the Adolescents in Kerala.

REVIEW OF LITERATURE

Michal Piasecki and Sean Hanna (2011) quoted that the Paradox of Choice has been recognised as one of the major reasons for decision fatigue, creating lack of meaningful choice with lower amounts of satisfaction. But this conclusion was overstated and argued by Kelly Kautz (2014). Similar results were incorporated in the studies of Dmitri Davydov (2012); where he mentioned that confused customers never buy even if choices are many or few; despite simplicity being the key choice within constraints and it's what freedom within these limits that result in satisfied customers. In the book, The Paradox of Choice: Why More is Less written by Barry Schwartz in 2004; he assembled his arguments from various fields of modern psychology studying how subjective wellbeing (happiness) is affected by success or failure of goal achievement. He further highlighted that the hallmark of individual freedom and self-determination becomes detrimental to our psychological and emotional wellbeing. This was indeed explained as a Paradox using a few experiments involving the Jam Study and The Cereal Test that he used for the study. Below discussed are the findings from the 'Jam Study' (Schwartz, 2004). Through this study, he concluded that Overchoices of today would delay choices for tomorrow, leading to Decision Paralysis.



Source: The Paradox of Choice: Why More is Less (Schwartz, 2004) modified for the study

There was another experiment named, "The Cereal Test", which aimed at confining to the point that when there is less satisfaction, there would be correspondingly more expectations. Moreover, Schwartz (2004) conducted this study at a grocery store where twenty three types

of cereals were kept. It was observed that even if we would manage to take a decision to choose one out of these 23 types, then gradually, we would feel less satisfied as the choice of substitute to cereals is less, there are more similar varieties of cereals. Though every moment, there is a tendency to pick up one cereal type at different moment of time, there would be a diminishing marginal utility in its specific consumption for the same type. The cereal would have been claimed of high quality, but then the consumers were found regretting taking such a decision and felt dissatisfied; looking for higher expectations. From both these experiments, he suggested that overchoice reduction could guarantee three main outcomes, namely; improving the quality of decision-making, making the choice process less stressful and more satisfaction with best choices made.

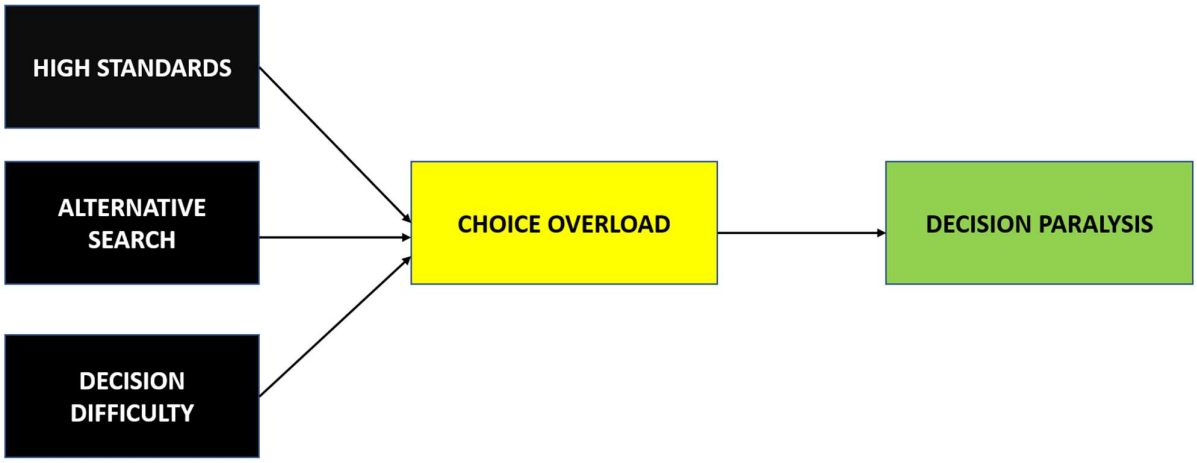
Schwartz (2004) supported the works of Patrick J. McGinnis on 'Fear of Missing Out' in 2004, and Dan Herman's study on 'Fear of Better Options' in 1996. Ellen Peters (2007), a psychologist cum Professor at Ohio State University reiterated that Maximisers end up in lots of regret with negative emotions with the choices they make. Iyengar et al. (2004) supported the point that when employees have many alternatives to their retirement plans; then a few employees would only participate. Had the number of choices been comparatively lower, then much more employees would try to be its beneficiaries. Schwartz's hypothesis concerned with relationships to well-being received differential support depending on whether total scores or subscales were used. Schwartz et al. (2002) reported the results of several studies, all of which supported the hypothesized adverse relationships of maximization to psychological well-being: In the first study, there was a negative correlation between Maximisation and happiness, optimism, self-esteem, and life satisfaction and further, Maximisation was positively correlated with depression, regret, and perfectionism. Four other studies showed that Maximization Scale total scores were positively correlated to depression and negatively correlated to subjective wellbeing. Through these studies, Schwartz et al. explained that maximizers engage extensively in alternative search by increasing the possibilities of finding the best option, but it also induces much anticipated regret decreasing pleasure once a choice has been made. Relatively the studies by Nenkov et al. (2008) included two item measures of each of these three factors. They found that scores on the high standards and optimism are positively correlated, but negatively correlated with depression, and uncorrelated with subjective happiness. Opposite pattern was shown by Decision difficulty, having been negatively correlated with subjective happiness and optimism and positively correlated with depression.

Lai (2010) concluded that the decision difficulty category is the key factor leading to negative correlations with well-being outcomes, which evenly supports the findings of Nenkov et al. (2008). On the contrary, Diab et al. (2008) found evidence suggesting that the high standards were responsible for this relationship, because smaller correlations were found when maladaptive personality traits were compared with Maximization Tendency Scale rather than the Maximization Scale. Rim et al. (2011) concluded that the Maximization Scale measures three separate factors as postulated by its authors, but only the alternative search is positively correlated to decisional difficulty factors and is negatively correlated with indices of well-being. High standards correlated strongly with the Maximization Tendency Scale (consisting of mainly high standards items) and was strongly correlated with positive indices of wellbeing

(e.g., optimism and happiness) and functioning (e.g., self-esteem and self-efficacy). The high standards subscale and Maximization Tendency Scale were positively correlated to analytical decision-making styles, while the alternative search and decision difficulty subscales were positively correlated to regret-based decision-making styles and procrastination.

CONCEPTUAL FRAMEWORK FOR THE STUDY

Based on the previous research studies conducted on the nature, measurement and correlates of Maximisation behaviour with an attitude of choice overload; the current study in this paper focuses on developing and evaluating new variables of high standards, decision difficulty and alternative search dimensions. The study intends to identify the causal variables for Choice Overload and its impact on Decision Paralysis among Adolescents in Kerala. As per the model conceptualised for the study, three important factors identified as independent variables include High Standards, Decision Difficulty and Alternative Search. Based on these factors, adolescents were personified as 'maximisers' or 'satisficers' based on the revised Maximisation Inventory (Schwartz, 2002). Each reversible arrows between these three factors guesses out the possibilities of relationship between the variables. Similarly, the single arrow of these factors leading to Decision Paralysis explains their specific impact recognised during the study. This is clear from the model discussed below.



METHODOLOGY OF THE STUDY

Population

As per the 2021 Kerala Demographics Report, the total population in the state of Kerala across fourteen districts was nearly 3.55 crores. Out of which, the Adolescents accounted approximately to 16.3% of the total state population. This study included adolescents from North, South and Central parts of Kerala.

Sample and Sample Unit

Sample size of 232 adolescents were chosen as respondents for the study using the Lottery sampling method. Here, the details of adolescent groups involving men, women and transgenders were identified through snowball sampling and certainly, they were numbered for random picks after thorough shuffling. The identification was carried out based on an assumption that adolescent groups should include at least one member from North, Centre and Southern parts of Kerala state.

Scope of the Study

The study includes adolescents from the state of Kerala, India. The Revised Maximisation Inventory by Schwartz et al, (2016) involving thirty-nine statements was modified with additional new statements found relevant for the study; grouped under three variable heads: High Standards, Decision Difficulty and Alternative Search; rated on a five-point Likert Scale. (5-strongly agree, 4-agree, 3-neutrally agree, 2-disagree and 1-strongly disagree).

Tools for Data Collection

Initially, in 1955, Simon studied only two factors: the desire to optimise choice and alternative search; for defining the concept, of 'Maximisation'. Further, Schwartz revised this scale to include two more new variables substituting desire for choice optimisation (Simon, 1955) with High Standards and Decision Difficulty. This actual scale included only thirteen statements. Later in the study, Sixteen statements were grouped under independent variable 1: High Standards; thirteen statements under independent variable 2: Alternative Search, and; ten statements under independent variable 3: Decision Difficulty. The dependent variable identified was Decision Paralysis. The decision scores at a five-point rating produced a total weight of 195; which was then converted to a three-point rating weighing a total of 117. These scores were used to evaluate the decision-making styles of adolescents in the study, classifying them into three results: (i) 71-117 (Maximisers, high Overthinkers); (ii) 24-70 (Moderately Maximisers, medium Overthinkers) and, (iii) 23 and Below (Satisficers, Optimised thinkers).

Method of Data Analysis and Interpretation

Data collected were tabulated and analysis was made based on the simple percentage analysis, descriptive analysis (mean, standard deviation), and inferential analysis (t-test and ANOVA). Path Analysis has been used to graphically represent a set of algebraic relationships among variables. Data were analysed as follows:

Demographic details of Adolescents

In order to understand the demographic diversity of the adolescents in Kerala, specific variables were used for the study, namely; Gender, Religion, and Family status.

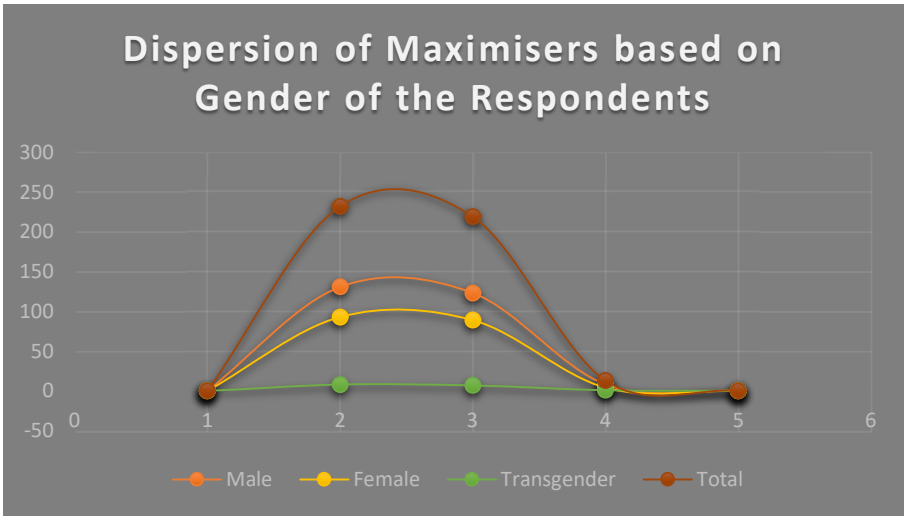
Table 1 explains the demographic variables used for the study indicating that most of the respondents were Male (56.5%), followed by Female (40.1%), and Transgenders (3.4%). It exhibits that majority of the respondents were Muslims (46.1%), followed by 30.6% belonging to Christianity and 18.1% falling into the category of Hindu community. The least weight was assigned to other religious groups (approximated 5.2%). While considering the Family status

of the respondents, the majority of the adolescents were confined to the Nuclear family group (around 60.3%) and further, and the remaining was shared by the Joint family group (approximately 39.7%). It is evident from the table that out of 232 respondents, 219 are maximisers (i.e., 56.16% of males, 40.64% of females, and 3.20% of transgenders) and the remaining 13 respondents are moderately maximisers (i.e., 61.54% of males, 30.77% of females and 7.67% are transgenders). Religion-wise presentation of data quotes that 19.18% of Hindus, 43.38% of Muslims, 33.33% of Christians, and 4.11% of the respondents were included in other religious groups. These statistics represent the men, women, and transgender population used for the study. Of the moderate maximisers indicating the study, 7.69% of Hindus, 53.85% of Muslims, 38.46% of Christians, and 4.11% represented other groups. The Maximisers were dispersed maximum (around 64.38%) among Nuclear family members and the remaining to joint families. Further, the statistics showing Moderate Maximisers were shared among 61.54% of Nuclear family and 38.46% of Joint family among the respondents in the study. In toto, none of these respondents were inclined to depict the qualities of Satisficers or undergo optimised thinking.

Table 1: Demographic details of Adolescents in the study

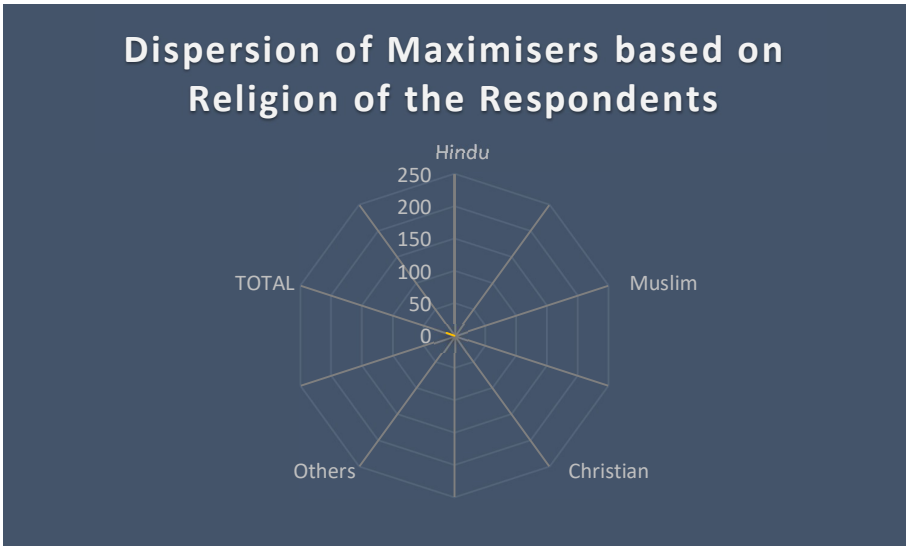
Demographic Variables	No. of Respondents	Percentage	No. of Maximisers (No. & %)	No. of Moderate Maximisers	No. of Satisficers
Gender:					
Male	131	56.5	123 (56.16)	8 (61.54)	0 (0)
Female	93	40.1	89 (40.64)	4 (30.77)	0 (0)
Transgender	8	3.4	7 (3.20)	1 (7.69)	0 (0)
TOTAL	**232**	**100**	**219 (100)**	**13 (100)**	**0 (100)**

Figure 1 shows the dispersed rate of Maximisers based on the Gender of the Respondents



Religion:					
Hindu	42	18.1	42	1	0
			(19.18)	(7.69)	(0)
Muslim	107	46.1	95	7	0
			(43.38)	(53.85)	(0)
Christian	71	30.6	73	5	0
			(33.33)	(38.46)	(0)
Others	12	5.2	9	0	0
			(4.11)	(0)	(0)
TOTAL	**232**	**100**	**219**	**13**	**0**
			(100)	**(100)**	**(100)**

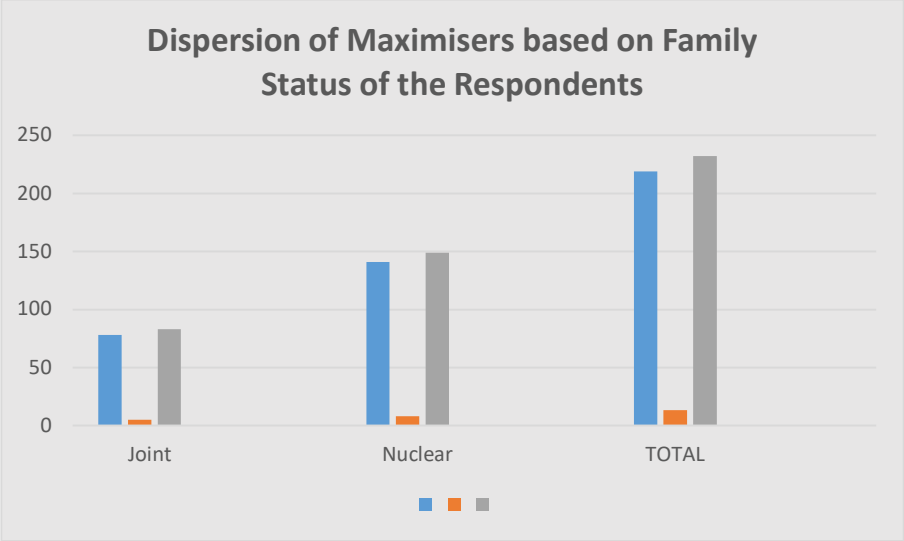
Figure 2 shows the dispersed rate of Maximisers based on the Religion of the Respondents



Family Status:					
Joint	92	39.7	78	5	0
			(35.62)	(38.46)	(0)
Nuclear	140	60.3	141	8	0
			(64.38)	(61.54)	(0)

TOTAL	**232**	**100**	**219 (100)**	**13 (100)**	**0 (100)**

Figure 3 shows the dispersed rate of Maximisers based on the Family Status of the Respondents



After collecting the data, the responses were recorded in SPSS, and reliability test was conducted for each component. Table 2 exhibits the Cronbach's value for "High Standards" is 0.813, "Alternative Search" is 0.798, "Decision Difficulty" is 0.883, "Choice Overload" is 0.763, "Decision Paralysis" is 0.701. According to Chong and Carole (2017) and Hair Jr. et al. (2017), the acceptable value of Cronbach's alpha is 0.7 and above. The Cronbach's alpha of all the five variables was found to be above 0.7, which fulfils the condition.

Table 2 showing Reliability and Validity Test

Variable	Cronbach's Alpha	N of Items	Mean
High Standards	.813	11	3.7257
Alternative Search	.798	11	3.8166
Decision Difficulty	.883	10	3.7168
Choice Overload	.763	6	3.8068
Decision Paralysis	.701	6	3.7809

Validity

Validity testing means testing the instrument whether it has ability to measure what it intends to measure. The two forms of validity testing are (1) content validity and (2) construct validity.

Content validity

The extent to which a test measures a representative sample of the subject matter or behaviour is understood by employing the content validity test. The questionnaire for the content validity was confirmed based on the opinions and suggestions of the adolescents in Kerala, and some changes were made to make the questionnaire clear, lucid and purposeful.

Construct validity

The research instrument must include a comprehensive list of items and constructs. These items and constructs were generated from the existing review of literature available. After the required variables were generated, the next step was to ensure that the statements included in the research instrument were simple, understandable and if they could command the required content validity or not. For this, a careful validation process was employed. Suggestions were given due consideration, and the variables included in the questionnaire were added, deleted, and suitably modified.

HYPOTHESIS TESTING

The hypotheses were tested and analysed based on the research objectives for the study; as shown below:

H_{11}: There is a significant difference in the Decision-making styles of Adolescents based on Gender.

It is evident from the Table 3 that the female adolescents tend to make various alternative searches for something or the other and become more decision paralytic. Similarly, the transgenders seem to observe confusions in taking decisions when provided with alternative options. Comparing both female and transgenders, the male category overthink a lot symptomising decision fatigue due to Choice Overload.

To facilitate the test of significance, the two-way ANOVA test was adopted and comparing the P values of all the five components in the below Table 3, it is found that there is a significant difference in the decision-making styles of "Alternative Search" and "Decision Paralysis": in terms of the gender of the Adolescents in Kerala.

Table 3 showing Test result of significant difference in Decision-making styles of Adolescents based on Gender

Components	Gender							
	Male		Female		Transgender		F Value	P Value
	Mean	SD	Mean	SD	Mean	SD		
High Standards	3.68	0.51	3.79	0.59	3.77	0.70	1.206	0.301
Alternative Search	3.74	0.49	3.90	0.53	4.11	0.33	4.011	**0.019*****
Decision Difficulty	3.69	0.65	3.75	0.75	4.04	0.53	1.164	0.314
Choice Overload	3.79	0.57	3.82	0.69	4.06	0.34	0.762	0.468
Decision Paralysis	3.67	0.50	3.91	0.60	3.77	0.38	4.815	**0.009*****

*** denotes highly significant @ 5% level

H_{12}: High Standards, Alternative Search and Decision Difficulty will have significant impact on Choice Overload and Decision Paralysis.

The result from Table 4 portrays there is a very high significant impact of the high standards, alternative search and decision difficulties on the Decision Paralysis compared to their impact over Choice Overload. This is evident from the R-Squared value of 55.9% revealing that the regression model has been explained by nearly 56% of the variability observed in the Decision Paralysis than that of nearly 46% (45.7%) of the variability in the Choice Overload. Also, the beta values estimated are 0.5, which proves that this model is well explained by both the regular and target variables. Hence, the model stands good fit.

Table 4 showing the Significant impact of High Standards, Alternative Search and Decision Difficulty on Choice Overload and Decision Paralysis

Dependent Variables	Choice Overload			Decision Paralysis		
Independent Variables	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
High Standards	.096	1.239	.217	.288	4.135	.000***
Alternative Search	.245	2.608	.010***	.351	4.134	.000***
Decision Difficulty	.384	4.500	.000***	.173	2.248	.026***
F value	64.065			96.160		
P value	.000***			**.000*** **		
R	.676			.747		
R Square	.457			.559		
Adjusted R Square	.450			.553		

Note: *** highly significant at 5% level

H_{13}: Factors contributing to decision-making styles are correlated to each other.

Table 5 depicts that all the factors contributing to decision-making styles are highly correlated to each other, though their correlation coefficient values are positive and show positively correlated (Pearson, 1896). From the results stated in the table below, it has been estimated that the correlation between “Alternative search” and “Decision Difficulty” is more significant based on their rho-value; though other variables stay positively correlated. Similarly, the correlation between “choice overload” and “decision paralysis” is stated less significant comparatively due to it lower rho-value.

Table 5 showing the correlation between the factors contributing to decision-making styles of Adolescents

Variables	High Standards	Alternative Search	Decision Difficulty	Choice Overload	Decision Paralysis
High Standards	1	.762***	.701***	.552***	.677***
Alternative Search		1	.811***	.630***	.711***
Decision Difficulty			1	.650***	.660***
Choice Overload				1	530***
Decision Paralysis					1

Note: *** highly significant at 5% level

H_{14}: Decision Paralysis depends on Choice Overload, High Standards, Alternative Search and Decision Difficulty of the Adolescents in Kerala.

Path Analysis

To test the hypthesised model, the Structural Equation Modelling was used and estimate the relationship between constructs of the model. Since the validity and reliability results of the data have already been verified, the Chi-square goodness of fit results has been employed to test whether the data available fits into the proposed conceptual model with the estimated model. The value of this normed Chi-square should not exceed 3 (Hair et el., 2010). The values of GFI, AGFI, NFI and CFI must be in the range of 0.80 to 0.89 to render the model as acceptable, and if the value is above 0.90, the model shall be considered as very good fit model (Hair et al., 2010). Looking at the results of the estimation and the modification index, some modifications have already been made. The goodness fit of the model can be assessed based on the below prescribed minimum requirement.

Table 6: Results of Goodness of Fit Test Confirmatory Factor Analysis between High standards, Alternative search, Decision difficulty, Choice overload and Decision Paralysis

Fit statistic	Recommended	Obtained
x^2	-	39.149
Df	-	17
x^2 significant	$p \geq 0.05$	.089
x^2 /df	≤2- 5.0	2.302
GFI	≥ 0.90	0.927
AGFI	>0.80	0.834
NFI	≥ 0.90	0.917
RMSEA	≤0.05	0.032

Source: Hair et al. (1998, 2010); Hu and Bentler (1999); Byrne (2001, 2010), and Ernest et al. (2008) (based on the computed primary data).

As per the results displayed in the table, the chi-square value and the degrees of freedom of the model tends to be 39.149 and 17 respectively. With respect to x^2 significance, the obtained value as per the recommended requirement is greater than 0.05 i.e. 0.089. As per the recommended values for GFI and NFI is above 0.90, the model proved to be significant with 0.927 and 0.917 respectively as obtained values. AGFI (0.834) and RMSEA (0.032) also showed goodness of fit by fulfilling the minimum required criteria given by Hair et al. (1998, 2010); Hu and Bentler (1999); Byrne (2001, 2010), and Ernest et al. (2008). As all the obtained value from the proposed model fulfils such minimum, it can be deduced that the proposed model shows goodness of fit between the constructs used in model fitness.

Path Model

The Path Model (Figure 4) portrays the independent variables: High standards, Alternative search and Decision difficulty which has been showing significant impact contributing to the dependent variable: Choice Overload. Further, the model predicted the path contributing to the Decision Paralysis, considering the Choice Overload as the independent variable.

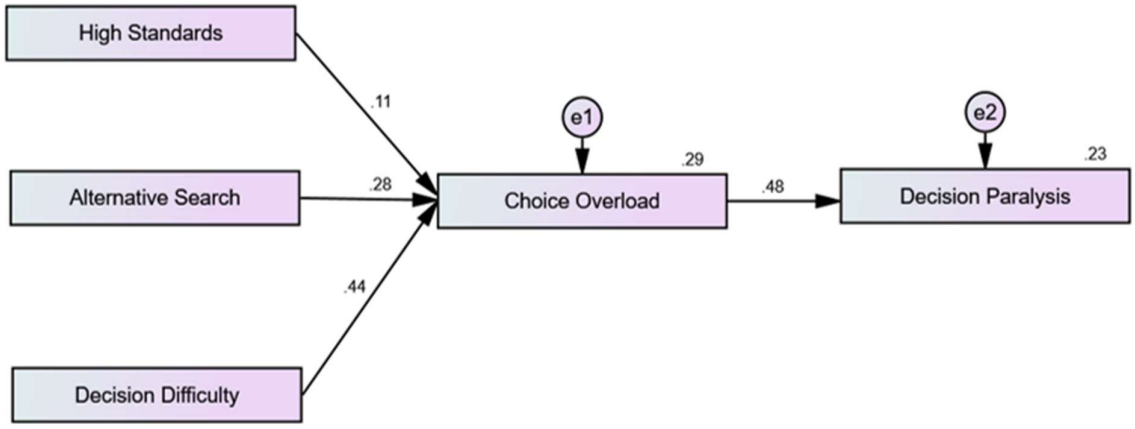


Figure 4 showing Path Analysis

Certainly, the regression weights estimated predicted the fitness of the model tested and the following results were summarised:

Table 7 showing the Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
CO <--- HS1	.107	.054	1.974	***	**Highly Significant**
CO <--- AS2	.297	.059	5.063	***	**Highly Significant**
CO <--- DD2	.342	.043	7.931	***	**Highly Significant**
DI <--- CO	.474	.057	8.271	***	**Highly Significant**

The table 7 above exhibits the direct effect of independent variable on the dependent variable. To assess the positive impact of the one variable on the other, two hypotheses have been framed and disused as follows,

$H_{14.1}$: Greater the High standards, Alternative search and the Decision difficulty, then greater will be the Choice Overload problem

As per the above table, the estimates for "High Standards" (E=0.107, P<0.05***), "Alternative Search" (E=0.297, P<0.05***), and "Decision Difficulty" (E=0.342, P<0.05***) were found at 95% level of confidence; proving that Choice Overload problem arises due to the positive impact of the higher standards set, overthinking of alternatives searched out and the difficulties in taking decisions. Hence, this hypothesis states proved.

$H_{14.2}$: More the Choice Overload issue faced by adolescents, then more will be their decision paralysis

The study attempted to measure the impact of Choice Overload on the Decision Paralysis situation being faced by the Adolescents in Kerala recently. Since the estimate value was found 0.474 with P-value less than 5% level of significance; contributing to the result that increased choice overload issues burdens adolescents' thoughts due to overly exerted stress both emotionally and cognitively. This in turn, leads to Decision Paralysis situation. Hence, the stated hypothesis has been proven successfully.

IMPLICATIONS OF THE STUDY

This section explains what the findings of the study would really mean to researchers and how it would impact the future research in this area. It includes:

Managerial Implications

Adolescents tend to have harder time experiencing regret, fear and failure as they are less satisfied with their choices opted. Too many choices have entangled their decisions and in fact, making them feel more paralytic in Kerala. As Schwartz (2004) has rightly mentioned in his famous book, The Paradox of Choice: Why More is Less; we must articulate the fact that eliminating more choices could reduce our anxiety and, obviously manage our choice decisions. This could result in accelerating their inner drive, perceived control over choices and thereby; overall wellbeing.

Policy Implications

Situations of Overchoice leads to overthinking; symptomizing signs of decision fatigue. This happens gradually with expressions of dissatisfaction amongst adolescents. Often regretting

without any trade-off in decisions being taken could psychologically make them more depressed and reduce the energy to undertake further actions. As the study reveals previously, most of the adolescents are high maximisers, due to which they face the fears of missing out while using social media or the fears of better choice during decision-making. The study aims at identifying the reasons for adolescents' decision paralysis, attributing with a low tolerance for experiencing happiness in decisions being taken related to career choices, relationships or anything. It's indeed the first research that such an inventory is used to attempt analysing the decision-making styles among adolescents in Kerala, India.

Social Implications

The study highlights Schwartz's belief on adolescents that infinite choices paralyse and exhausts the human psyche; setting them unreasonably towards higher expectations, questioning the choices opted and making themselves the victims of their own failures. The state of Kerala accounts majority of adolescents from the total population. Having known this fact, if the adolescents' decisions are not pipelined and guided to make better choices, then this would make the situation more paralytic and paradoxical. The society seems to be more overthinkers looking for high perfectionism. Their creativity could be blended with critical reasoning to resemble the decision success at every point of time.

Scope for future research

Constructs of Maximising tendencies illustrates individual differences and their efforts to strive at making best choices. Also, this tendency has been expressed across decision dimensions. Although this assumption seems to be a central tenet of the Choice Paradox, the study reveals that not much research has been conducted to explicitly put them onto test. The present study constitutes the systematic attempt to test the assumption that maximisers overthink and stress a lot, with less efforts to explore the characteristics of satisficers. Decisions on experiences, leisures and other services have been studied to lesser degree. In fact, the study supports that decision outcomes are harder to measure; though efforts are made to make judgements on Maximisers and Satisficers using a three-point rating scale. The entire statements used in the questionnaire is examined from the context of maximising (shown the score of 5- 'strongly agree', the maximum score for each statement using five-point rating scale; whereas the satisficers with least scores of 2 and 1 (disagree and strongly disagree respectively). Hence, this study paves better ways for future researchers to identify these gaps in research and formulate a new inventory on 'Maximisation and Satisficing' Scale, keeping in mind the trade-off between both these traits of adolescents.

Academic Contributions of the Study

The Adolescents in Kerala state include the school-going children with lots of desires and aspirations. When their choices are large; they start feeling guilty, pining over their missed opportunities and rejected alternatives. The study revealed that majority of the adolescent respondents have been identified as 'Maximisers'. Unlike maximising adolescents, satisficers do not need lots of choices. They make quick decisions, driven by their gut feelings. They offset their options which are 'good enough' up to their optimised decisions. This twin

classification among adolescent groups in Kerala as 'Maximisers or 'Satisficers' would favour themselves, their parents, teachers and society as whole. Student groups falling to adolescent age group could sort out their 'Identity Crisis' (Erikson, 1970) issues and build self-esteem by identifying their strengths and weaknesses. For instance, if the student is a Maximiser, then he/ she could take efforts to identify the frequency of overthinking, its reasons and how better choices they could make by increasing their perceived control. On the contrary, if they are satisficers, they could be guaranteed as 'happy individuals' without any chaos in choices being taken. This self-realisation could help them in reducing their decision fatigue on career choices, study-related matters, relationships and others. Once the child has been identified as either of these traits, his/her parents or teachers or society could help him/ her in being guided to take better decisions in life, or how to be happy and make others happier by improving the quality of life.

Conclusion

Observing that there so many options to be chosen is a difficult task which could problematise the entire decision-making process. Hence, creating a list evaluating the importance of each goal, arraying the options, picking the winning options and further modification of goals could prosper oneself in better decisiveness, minimising the symptoms of decision fatigue among the adolescents in Kerala.

Declarations-

Ethics approval and consent to participate: Considered.

Consent for Publication: Not Applicable.

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