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Revitalizing Decision-Making from Behavioral Perspectives: An Empirical Study in India

Neha Verma[1], Santosh Rangnekar[2] and Mukesh Kumar Barua[3]

Abstract

Purpose: *Decision making style (DMS) helps in understanding the different decision processes used by a person while facing apparently identical situations. The working executives have to take many decisions while disposing their duties and their DMS determine their Organizations' fate. This study aimed and traced the DMS(s) of Indian Executives and related the same with their personal as well as contextual characteristics.*

Design/Methodology/Approach: *Senior, middle and lower level executives of Indian Public and Private Organizations were targeted and General Decision Making Style of 374 executives of Manufacturing as well as Service industries were measured through self reporting questionnaires. Statistics like Descriptive statistics, Correlation, Anova and Independent sample t-tests were used to answer the research questions.*

Findings: *Major DMS came out to be Rational followed by intuitive and Dependent as back up DMS. Least Avoidant and second least Spontaneous DMS were obtained. Executives had flexibility in their DMS(s) and there was significant difference in the DMS(s) across personal and contextual characteristics.*

Implications/ limitations: *The implications were specific and in general. It advocated flexibility in DMS i.e. to have preliminary as well as back up DMS to fetch benefits from various styles. However the survey method had associated biases.*

Originality/ Value: *The paper revitalized the decision making phenomenon from behavioral perspectives.*

Keywords: *Avoidant, Decision making style, Dependent, Intuitive, Rational, Spontaneous*

Introduction

Decision making is a process of choosing between different alternatives while pursuing one's goal, (Miller and Byrnes, 2001). It involves many cognitive processes for e.g. information gathering, problem solving, judgement, memory and learning, (Baiocco *et al.,* 2009). Different individuals

1. Research Scholar, Department of Management Studies
Indian Institute of Technology, Roorkee
Tele: +91-9027499280, Email: neha.verma.1801@gmail.com
2. Associate Professor and Head
Department of Management Studies, Indian Institute of Technology, Roorkee
Tele: +91-1332-285422, Email: srangnekar1@gmail.com
3. Assistant Professor
Department of Management Studies, Indian Institute of Technology, Roorkee
Tele: +91-1332-285678, Email: barua71@yahoo.co.in

approach decisions in different ways, (Galotti *et al.*, 2006), for e.g. few moves in objective manner with explicit analyses, some are more holistic and intuitive, and few prefer to decide alone while few depend on others. Decision making style (DMS) is an individual's typical way of interpreting and responding to decision making tasks, (Harren, 1979, Driver, 1979). DMS helps in understanding the different decision processes used by a person while facing apparently identical situations, (Nutt, 1990).The models based on the relationship between personality and decision making have revealed many decision making styles. DMS can be different in varied contexts but there is always one predominant style that dominates a person's behavior with respect to decision making tasks. Such DMS determines the decision maker's success or effectiveness. Likewise every organization's fate is determined by the characteristic DMS of its employees. The research into decision making behavior is basically descriptive (Anderson, 2000); this study is an attempt to empirically measure the DMS of Indian Senior, Middle and Junior level executives.

Literature Review

According to Scott and Bruce, (1995), DMS is the usual pattern to respond in a particular way according to the specific context in which the decision has to be taken. Harren, (1979) identified three different DMS(s): Rational (making decisions using rationality), Dependent (making decisions by means of other's opinion and expectations) and Intuitive (making decisions based on feelings and emotions). Based on cognitive complexity and values orientation the four DMS as suggested by Rowe and Mason, (1987) are Behavioural, Conceptual, Analytical and Directive. Two categories of DMS(s) by Mann *et al.*, (1989) are Adaptive (self-confidence and vigilance) and Maladaptive (panic, evasiveness and complacency). Scott and Bruce, (1995) validated a questionnaire (General Decision Making Style Inventory i.e GDMS) measuring four DMS(s) namely Rational, Intuitive, Dependent, and Avoidant. A fifth style came into existence during the validation of the instrument, and it was named as Spontaneous DMS. These five GDMS(s) have received maximum literature support time to time, for e.g. Loo, (2000); Spicer and Sadler Smith, (2005); Thunholm, (2004, 2008); Gambetti *et al.*, (2008); Baiocco *et al.*, (2009); and Salo and Allwood, (2011). The conceptual framework of this research is also based on these five GDMS and the Literature specific to these five styles is as follows:

Rational DMS

This style symbolizes exhaustive information search and logical evaluation of alternatives to choose the best alternative, (Scott and Bruce, 1995). In view of Harren, (1979), a rational decision maker accepts responsibility for decision making; anticipates the consequences of previous and current decisions; also gathers and weighs information carefully, thoroughly and objectively, (Cook and Harren, 1979). Therefore, systematic appraisal and logical deliberation with an expanded time perspective are shown by rational decision maker. Likewise Philips *et al.*, (1985) also confirmed that rational DMS relate with extended time perspective, planfullness, and systematic and cautious evaluation. It is to approach the task objectively, unemotionally, analytically and thoroughly. Thus Rational DMS has been considered as ideal, (Harren, 1979; Chartrand *et al.*, 1993; Mau and Jepsen, 1979). Keegan, (1984) related the decision making types to various managerial functions and suggested that Thinking/Rational DMS is needed for evaluation of alternatives to select the solution, while the other daily supervision may not need rationality always. Being rational is better from normative perspective, than being avoidant, dependent or spontaneous, (Galotti *et al.*, 2006). Therefore this style has been associated with positive behaviors and such decision makers are considered as ideal.

Intuitive DMS

It attributes attention to details, unsystematic information processing, and reliance on premonitions and feelings, (Scott and Bruce, 1995). It connotes to approach the task personally, emotionally, holistically and, drawing on one's feeling, (Klaczynski, 2001; Stanovich and West, 2000). According to Philips *et al.*, (1985), the intuitive decision maker considers emotional factors often in an impulsive manner and makes decisions based on how things are right now rather than in the future and decides without checking out the facts. During a factor analysis, the items pertaining to intuitive style loaded negatively on rational DMS, (Philips *et al.*, 1985) and thus it was attributed as lack of planfullness and deciding in less time. But, the intuitive decision maker also accepts responsibility for decision making similar to rational decision maker. However unlike Rational DMS, the reliance in Intuitive DMS is on "fantasy, attention to present feelings, and an emotional self-awareness", (Harren, 1979, p. 125). Anderson, (2000) tested and affirmed the association of intuition in managers with effectiveness. McCaulley, (1990) acclaimed that intuitive and thinking styles are most likely to be successful, whereas Eccles and Nohria (1992) pointed out that managers must be able to scan opportunities and threat and for that intuition is needed. There have been mixed opinions about this style. It has been addressed unplanned but also considered as essential for effectiveness.

Dependent DMS

This DMS shows the dependence on advice from others before making important decisions, (Scott and Bruce, 1995). Unlike Rational and Intuitive, the Dependent decision maker transfers the responsibility for choice to external events or other people, (Harren, 1979). Therefore the dependent decision maker is passive, compliant, and heavily influenced by the expectations of others, (Harren, 1979). In a study by Philips *et al.*, (1985), the dependent factor was loaded by items of on reliance on the help, support, opinions, and directions of others. It attributed that dependent decision makers are influenced by the expectations of others and would be likely to delay choice until the guidance of friends or experts is obtained. Their study thereby justified Harren's (1979) conceptualization of dependent DMS. In view of Salo and Allwood, (2011) the dependent decision maker rescue decision making tasks by asking for the advice of others. Hence this style is often associated with a kind of avoidance. This styles results in high stress and poor sleep, and dependent decision makers reveal forerunning conditions of stress. Being dependent on others for decisions can enhance the effectiveness through best inputs of experts but it can also lead to delays and pendency. Thus this style is fruitful as well as contagious at times.

Avoidant DMS

In view of Scott and Bruce, (1995), it is to postpone and avoid making decisions, and rescuing the decision making task as long as possible. Usually a person who doubts his or her decision making ability, actually avoids making decisions, (Salo and Allwood, 2011). However Avoidant DMS also attributes postponing decisions to search for more information and ponder the possibilities. But generally this DMS is negatively associated with satisfaction with life, and leads to poor sleep and higher perceived stress. Thus this style is associated with negative features like feel regret and tendency to maximize, (Parker *et al.*, 2007). Such decision maker displays burnout possibilities. In a study on army officers' sample, Thunholm, (2008) reported that Avoidant DMS is positively related with negative stress. This is not a healthy way to approach making decisions, as here one attempts to postpone or avoid making a decision. Although taking time to reflect on options is good but avoiding or postponing making the decision can lead to negative consequences. According to Hablemitoglu and Yildirim, (2008), a person with an Avoidant DMS will make every effort to avoid from having to make a decision. Therefore

the avoidant style is more often considered negative unless the decision maker has a justifiable reason for avoidance.

Spontaneous DMS

This style represents a sense of immediacy to quickly take a stand and to reach a decision as quickly as possible with a desire to complete the decision making process quickly, (Scott and Bruce, 1995). The Spontaneous DMS is an expression of lesser chances of planning the work, (Salo and Allwood, 2011). Hence such decision makers should be provided with clear work directives. According to Coscarelli, (1983), spontaneous persons react to a total experience rather than breaking the total experience into components parts and reacting to each part separately. In doing so, they react to a particular component of the process (for e.g. objectives) and ignore the others. Such decision makers make holistic (i.e see a big picture) as well as quick decisions and move to new goals easily and without much consideration, (Osipow and Reed, 1985). They are quick because they tend to try all their choices in order to understand them completely. Hence they comfortably switch to new choice if the previous is proven wrong, (Jaehnig, 2008). With such ease, the spontaneous decision maker has lower associated risk unlike a rational person, whose everything is at stake with any single mistake.

The efficacy of a particular DMS depends on personal variables, context, and culture as well as on the particular decision-making tasks, (Mau, 1995). Johnson, (1978) also asserted that none of the DMS(s) is likely to be better or worse than the others. The spontaneous decision maker is impulsive or prone to making snap or spur of the moment decisions. This trait can be valuable in terms of not over planning the future, but it is not always good to leave important decisions to be made on the spot. Primarily, this study would investigate and discuss the DMS of Indian executives in the light of facts surveyed in the literature. The assumption here is that Rational and Intuitive DMS being well supported in the literature are most expected from Indian Executives, followed by Dependent DMS. However, least avoidance and spontaneity is expected in their decision making behaviors. Moreover the differences in DMS across personal and contextual attributes will also be explored. Based on the literature review and discussion thereof, the study has following two research questions:

RQ1: Which decision making styles are major and minor in the decision making behaviors of Indian executives?

RQ2: Whether Indian executives have flexibility in their DMS(s)? If yes, then what are the benefits of being flexible?

RQ3: Is there any significant difference between the DMS(s) across personal and contextual attributes like Organization type, Sector, Industry, Age, Experience, Annual Income, Education and Gender?

Methodology

The Sample

The population for the study comprised of senior, middle and junior level executives of Indian Public and Private Organizations from Manufacturing as well as Service industries. On *convenience basis*, total *374 samples* were collected face to face as well as online. Around 275 survey questions were personally distributed and above 500 mails were sent. 168 completely filled questionnaires were recollected successfully and 206 complete responses came online. The aggregate response rate on the survey was 48.26% (374/775).

The Instrument

The GDMS (Scott and Bruce, 1995) asked the respondents to rate the 25 items as applicable to them. Each item had 5 options ranging from 1 (strongly disagree) to 5 (strongly agree). The items contributed towards measurement of five styles: Rational, Intuitive, Dependent, Avoidant and Spontaneous (5 items for each style). The examples of items for these respective styles are: I plan my important decisions carefully; When making decisions, I rely upon my instincts; I often need the assistance of other people when making important decisions; I avoid making important decisions until the pressure is on; and I often make decisions on the spur of the moment. The reliabilities (Cronbach's alpha) for the five sub scales were 0.68, 0.71, 0.71, 0.79 and 0.76.

Procedure

The responses were first subjected to average score analysis (Table 2) and afterwards the individual score counts were obtained (Table 3). Then, correlation amongst the styles and demographic particulars were measured to identify the association of personal and contextual characteristics with the styles (Table 2). Thereafter the significant differences in DMS(s) across demographic particulars were obtained through Anova and independent sample t-test analyses. SPSS 17.0 was used for the entire analysis.

Results

Table 1: The Demographic Profile of the Respondents

Criteria	Sub Group	Code	Distribution	%
Sector	Banking & Finance	0	22	5.88
	Telecom	1	13	3.47
	Power & Mining	2	35	9.36
	Electronics/Electrical Products Manufacturing	3	57	15.24
	Hospitality/Health/Defence/Social Development	4	17	4.54
	Information Technology (IT)	5	82	21.92
	Real Estate/Infrastructure/Construction/Logistics	6	116	31.02
	Media	7	5	1.34
	Retail/FMCG/Textiles	8	17	4.54
	Automobile	9	10	2.67
Organization Type	Public	0	66	17.65
	Private	1	308	82.35
Industry	Manufacturing	0	219	58.55
	Service	1	76	20.32
	Manufacturing & Service	2	79	21.12
Age	23-31 yrs	0	223	59.62
	32-40 yrs	1	87	23.26
	41-49 yrs	2	47	12.56
	50-58 yrs	3	17	4.54
Experience	Upto 9 yrs	0	243	64.97
	10 to 18 yrs	1	79	21.12
	19 to 27 yrs	2	40	10.69
	Above 27 yrs	3	12	3.21
Annual Income	Upto 5 lacs	0	188	50.27
	5 to 10 lacs	1	116	31.02
	Above 10 lacs	2	59	15.77
Gender	Male	0	337	90.11
	Female	1	37	9.89
Education	Only Diploma	0	35	9.36
	Graduate	1	107	28.61
	Graduate & Diploma	2	6	1.60
	Post Graduate	3	209	55.88
	Post Graduate & Diploma	4	13	3.47
	Doctorate	5	4	1.07

Table 1 shows the demographics of the respondents. Total 90.11% (337) were males and rests were females. The mean age and work experience of the respondents was 32.34 yrs and 8.6 yrs respectively. Majority were from private organizations (308, 82.35%) and manufacturing industry (219, 58.55%). Most had education level of post graduation (209, 55.88%) and annual income level of INR (Indian National Rupee) upto 5 lacs (188, 50.27%). Minority were from public organization (66, 17.65%), service sector (76, 20.32%), INR above 10 lacs income group (59, 15.77%), 50-58 yrs age group (17, 4.54%), above 27 yrs experience group (12, 3.21%), and doctoral educational level (4, 1.07%). A sub group analysis revealed that majority were from Real Estate/Infrastructure/Construction/Logistics sector (116, 31.02%), followed by IT sector (82, 21.92%), Electronics/Electrical Products Manufacturing sector (57, 15.24%), Power & Mining (35, 9.36%), and so on. Only a certain percentage belonged to Banking & Finance (22, 5.88%), Hospitality/Health/Defence/Social Development (17,4.54%), Retail/ FMCG/Textiles (17, 4.54%), Telecom (13, 3.47%), Automobile (10, 37.4) and least were from Media sector (5, 1.34%).

Table 2: Averages and Correlations of Demographic Attributes and DMS(s)

M/Md	SD	Sec	OT	Ind	Age	Exp	Inc	Gen	Ed	R	I	D	A
Sec	6	-	1										
OT	Pvt	-	**	1									
Ind	Mfgr	-	—-	**	1								
Age	32.34	8.05	—-	-.**	-**	1							
Exp	8.6	7.94	—-	-**	-**	**	1						
Inc	0	-	—-	-**	—-	**	**	1					
Gen	M	-	—-	—-	**	-**	-**	-*	1				
Ed	3	-	—-	**	**	-**	-**	—-	**	1			
R	22.23	2.55	—-	*	—-	—-	—-	—-	—-	*	1		
I	18.63	3.80	——	—-	—-	—-	—-	—-	—-	—-	—-	1	
D	17.89	3.98	**	**	—-	-**	-**	-**	—-	—-	**	*	1
A	11.56	4.67	—-	—-	—-	—-	—-	—-	-*	—-	-**	**	** 1
S	15.79	4.06	—-	—-	—-	—-	-*	—-	—-	—-	-*	**	—- **

*p< .05, **p<.01; where Sec= Sector, OT= Organization Type; Ind= Industry, Exp= Experience, Inc= Income per year, Gen= Gender, Ed= Education, R= Rational, I= Intuitive, D= Dependent, A= Avoidant, S= Spontaneous

As shown in Table 2, from highest to lowest the DMS scores were respectively of Rational (22.23/25, 88.92%), Intuitive (18.63/25, 74.52%), Dependent (17.89/25, 71.56%), Spontaneous (15.79/25, 63.16%) and Avoidant (11.56/25, 46.24%). Sector and Organization type had positive correlation (p<.01) with Dependent style, which indicated certain increase in dependence in decision making behaviors from Banking & Finance to Automobile Sector and from Public to Private organizations. Similarly, the negative association (p<.01) of Dependent DMS with age, experience and income indicated decreasing dependence of executives with rising age, experience and income. Education and Rational style positively correlated (p<.05) to show rising rationality with increasing educational levels. Whereas spontaneity found to reduce with growing experience (i.e negative association, (p<.05) and avoidance was higher in males as compared to females (p<.05). Few interesting correlations amongst the styles included the positive association of Rational style with Dependent (p<.01) which meant that rationality leads to increase dependence and vice versa; the negative association of Rational style with Avoidant (p<.01) and Spontaneous styles (p<.05), which indicated that increased rationality reduces the avoidance as well spontaneity;

the positive association of Intuitive style with Dependent (p<.05), Avoidant and Spontaneous DMS (p<.01), which signified that dependence, avoidance and spontaneity rise with rising intuition ; the positive association of Dependent and Avoidant style (p<.01), which denoted that with rising dependence the person tend to avoid his decision making tasks; and the positive association of Avoidant and Spontaneous DMS (p<.01), which implied that higher avoidance leads to higher spontaneity.

Table 3: Score Analysis and Frequency Counts of DMS(s)

Decision Making Styles	Frequencies	Percentage	Mean
Rational	248	66.31	23.26
Intuitive	31	8.28	22.19
Dependent	31	8.28	22.90
Avoidant	8	2.13	20.625
Spontaneous	9	2.41	22.333
Rational and Intuitive	19	5.08	22.21
Rational, Intuitive and Dependent	2	.53	23
Rational, Intuitive, Dependent and Spontaneous	1	.27	18
Rational and Dependent	10	2.67	21.81
Rational, Dependent and Spontaneous	2	.53	18.5
Rational, Dependent and Avoidant	1	.27	21
Rational and Spontaneous	2	.53	23.5
Rational and Avoidant	1	.27	20
Intuitive and Spontaneous	4	1.07	22.75
Intuitive, Dependent and Spontaneous	1	.27	25
Intuitive, Dependent and Avoidant	1	.27	25
Intuitive and Dependent	3	.8	24
Total	374	100	17.21

Table 3 reveals the frequency counts of dominating DMS. Here, the dominant style of majority was Rational (248, 66.31%), followed by Intuitive (31, 8.28%) and Dependent (31, 8.28%). Few executives had more than one dominant style, for e.g. Rational & Intuitive (19, 5.08%) and Rational & Dependent (10, 2.67%). Similarly few had dominating mixed styles like 4, 1.07 % (Intuitive & Spontaneous); 3, 0.8% (Intuitive & Dependent); 2, 0.53% (Rational, Intuitive & Dependent; Rational, Dependent & Spontaneous; Rational & Spontaneous); 1, 0.27% (Rational, Intuitive, Dependent & Spontaneous; Rational, Dependent & Avoidant; Rational & Avoidant; Intuitive, Dependent & Spontaneous; Intuitive, Dependent & Avoidant).

Table 4 reports the significant difference in DMS(s) on the basis of sector, organization type, industry, age group, experience, annual income and gender. Electronics/Electrical Products Manufacturing (p<.01), IT (p<.01) and Real Estate/Infrastructure/Construction/Logistics (p<.05) had higher dependent style as compared to Power & Mining sector. Private organizations had higher rationality (p<.05) and dependence (p<.01) as compared to public sector. Spontaneity

Table 4: Significant Differences in Decision Making Styles across Personal and Contextual Characteristics

Basis	DMS	Sub Group	t/Mean Difference (MD)	P
Sectors	Dependent	2 & 3	MD=-3.30	.004
		2 & 5	MD=-2.95	.008
		2 & 6	MD=-2.45	.040
Organization type	Rational	Public & Private	t=-1.998	.046
	Dependent	Public & Private	t=-4.707	.000
Industry	Spontaneous	Manufacturing & Service	MD=1.75	.003
Age groups	Dependent	0 & 2	MD=2.044	.007
Experience	Dependent	0 & 2	MD=2.30	.004
		1 & 2	MD=2.138	.027
	Avoidant	0 & 2	MD=2.70	.009
Annual Income	Intuitive	0 & 2	MD=1.338	.044
	Dependent	0 & 1	MD=1.107	.045
	Avoidant	0 & 1	MD=1.824	.002
		0 & 2	MD=1.953	.011
	Spontaneous	0 & 1	MD=1.255	.030
Gender	Avoidant	Male & Female	t=2.268	.024

*p< .05, p< .01, Note: Only significant results have been shown

was higher in manufacturing industry than that of service industry (p<.01). Dependent style was higher in 23-31 yrs age group than 41-49 yrs (p<.01). Both Dependent and Avoidant styles were higher in upto 9 yrs experience group than 19-27 yrs (p<.01) and also the Dependent style was higher in 10-18 yrs experience group than 19-27 yrs (p<.05). Annual Income wise, the Dependent (p<.05), Avoidant (p<.01) and Spontaneous (p<.05) styles were higher in upto 5 lacs INR group than that of 5 to 10 lacs INR group. Similarly, the Intuitive and Avoidant DMS were higher in upto 5 lacs INR group as compared to above 10 lacs INR group (p<.05). Males had higher Avoidant DMS than females (p<.05).

Discussion

Major and Minor DMS(s)

The results of the study indicated that Indian executives have Rational DMS as their preliminary DMS, and also that Intuitive as well as Dependent DMS are their back up DMS(s). It attributes that the executives perform exhaustive information search as well as logical evaluation of alternatives and accept responsibility for decision making. Such rationality is often accompanied with intuition to keep check on extended time perspective in being rational. Although, Rational DMS has been considered as opposite to Intuitive DMS by Philips *et al.*, (1985) but intuition is not always an emotional phenomenon, rather it is associated with attention to details (Scott and Bruce, 1995). Inspite of the unemotional and analytical rational approach, the intuition is utilized by the Indian executives to choose the best out of all available alternatives. Hence being ideal the highest Rational DMS attributes correct decision making profile, (Harren, 1979; Keegan, 1984; Chartrand *et al.*, 1993) and the next highest Intuitive style is also justified on the ground of the fact that intuition is needed for being able to scan opportunities and threat, (Eccles and Nohria, 1992).

Foremost Rational DMS is good as it leads to optimal solution through systematic approach. Also, the two foremost styles are indicating the probability of correct decisions (McCaulley, 1990) leveraged from benefits both Rational and Intuitive DMS. Executives' third highest Dependent style reflected the Indian social and cultural contexts. Indians have in built tendency to exchange views and seek expert views before making the ultimate decision. It attributes that Indian executives depend on others to operate effectively, (Verma *et al*., 2012). Moreover the Dependent DMS is justifiable as a backup DMS through its benefit of involving others in the decision making process, (Khasawneh *et al*., 2011). Vroom, (2003) also supported the view that additional to Rational DMS; the managers should consult with others in the organization while making important decisions. Thus from the above discussion it may be deduced that to better perform the decision making tasks the executives should have preliminary and back up DMS. The least Avoidant style and second last Spontaneous style signified that Indian executives have least tendency to avoid decisions and lesser chances of deciding at spur of the moment.

Flexibility in DMS

The correlations of styles affirmed that Indian executives are not stringent in their decision making behaviors. They use most often a combination of styles when faced with any decision making situation. This finding is in line with Scott and Bruce's (1995) and other successive scholars that the five DMS(s) are not mutually exclusive and that it is possible to use more than one style while making decisions. While being rational the decision maker may take advices from the surrounding people in order to gather more and more information before reaching to final option. Hence Rational DMS and Dependent DMS positively correlated. This is in congruence with Thunholm, (2004); Loo, (2000), Gambetti *et al*., (2008), and Baiocco *et al*., (2009). Rationality automatically reduces the avoidance as the rational decision maker is effortful enough to decide rather than avoid. This in turn lessens the chances of any sort of spontaneity or one click decision. Therefore there was negative correlation of Rational style with Avoidant and Spontaneous DMS.

The positive correlation of Intuitive and Dependent DMS can be justified as: with rising intuition, the decision maker may attribute the success of his/her decision to external sources like other people or any other external clue. Thus the intuitive decision maker becomes dependent on somebody else or something else. Moving on the further discussion, many a times the increased reliance on self gut or hunches causes delay in decisions. Here the decision maker avoids the decision unless he/she listens to the absolutely sound internal feeling. Hence rise of intuitive style may unknowingly hike the avoidant style. The positive correlation of Intuitive and Spontaneous style is in line with Loo, (2000); Thunholm, (2004); and Spicer and Sadler-Smith, (2005), who all addressed Spontaneous style as high speed Intuitive decision making. The intuitive decision maker is often considered as spontaneous as he/she does not spend much time on information gathering and fact finding; rather decides what he/she feels correct as per circumstances at that particular moment.

Further, too much dependence on others for self decisions leads to a tendency to rescue the decision making task. Such decision maker becomes avoidant with rising dependence. In other words, to avoid the decision making task, the decision maker awaits advices from others. Therefore the Dependent and Avoidant styles correlated positively here. Lastly the positive association of Avoidant and Spontaneous DMS implied that the executives' increased avoidance increases the chances of spontaneity, when and where they decide at last moment all of sudden to meet the deadlines.

The frequency counts revealed some mixed dominant styles. Majority of the respondents (47/374 i.e 12.56%) had clear dominance of mix styles in their decision making behaviors. For e.g.

there were few executives with Rational & Intuitive as their dominant DMS. This combination was not ironical as a mixed Rational and intuitive approach is often followed by people and such executives use both the styles equally. It might be because many times the repetitive nature of decisions don't require rational exercise, at such particular time the decision maker refers to past experience and decides what is obvious. Most often, the natural reaction and expected decisions also don't require pure rationality. This is in line with Spicer and Sadler-Smith, (2005) who advocated that ideally individuals should balance both Rational and Intuitive styles in their decision making behaviors. Likewise the combination of Rational & Dependent symbolized that few Indian executives balance rational and dependent approaches in their decision making behaviors. It also means they depend on others while gathering maximum information and weighing the alternatives to choose the best one. However, it is advisable here that the extent of dependence should be determined as per the requirement of self as well as on the basis of advisor's expertise. Advices from experienced and expert people will surely enhance the quality of decision. But a wrong advice can ruin the decision and may also destroy the secretiveness of many tasks. Hence, the sanctity of position profile should also be maintained, for e.g. finance persons should be rational but less dependent due to secretiveness of their profiles while an HR person can be intuitive as well as dependent in deciding.

The other combinations like Intuitive & Spontaneous, Intuitive & Dependent; Rational, Intuitive & Dependent etc also indicated that few executives have dominance of blend of styles in their decision making behaviors. Therefore the mixed styles have associated strengths and weaknesses of all the involved DMS. For instance intuitive & spontaneous executive has benefits of being speedy but at the same time prone to risk of failures due to wrong impulsivity based on intuition. Also, the person with more than 2 dominant styles has more associated strengths and weaknesses of all the involved DMS(s) and may become so unpredictable. Therefore with each increasing number of dominant style, the decision maker becomes prone to more risk and chances of failures become high. Hence it is very important to keep check on one's dominant DMS and to confine the same to maximum 2 or three best DMS(s). It is rather better to have primary and secondary DMS to fetch best out of all the styles as the majority of executives (327/374 i.e 84.43%) had dominant one style but all those had other styles as their back up DMS(s).

Significant Differences in DMS(s) Across Personal and Contextual Factors

Noticeably higher dependence amongst the executives of Electronics/Electrical Products Manufacturing, IT and Real Estate/Infrastructure/Construction/Logistics as compared to Power & Mining sector attributes that the position profiles in the later not necessarily require much dependence on others while making decisions. It might be because the construction, manufacturing and IT sector jobs are so interwoven that the completion of the small tasks or production targets demands for the consent and cooperation of forward and backward profiles. For e.g. any project here would be the responsibility of the whole team and thus contribution in parts would be needed to accomplish the project objectives. Several small projects are run simultaneously in such organizations and hence dependence is high there. But in Power and Mining sector, the dependence not certainly is high due to absence of any physical unit targets. Here the continuity of single one big project accounts for higher rationality to maintain the smooth functioning and spontaneity to deal with contingencies. Significant difference in dependence of Private and Public organizations also adds to the above discussion. Private sector had higher dependence as compared to the public sector and all the Power & Mining sector organizations in the survey were Public organizations.

The rationality of Private firms was significantly higher than Public sector indicating that

executives in Private sector are more rational. This is because the private firms are extremely profit oriented. Here the jobs are comparatively more temporary and unlike Public firms here no Job security exists. Retrenchments and Restigation in the name of organizational fate is common practice in private sector. In such scenario it becomes essential to pay full attention to details and attend to all facts before making important decisions. Any wrong decision can be dangerous for executives' jobs. Therefore the Private firms have higher rationality as compared to Public sector. Similarly, for being more cautious in their decision making, the executives of Private firms revealed higher dependence on others for improvement in their decision choices.

Higher Spontaneity in manufacturing industry than the service industry is justifiable on account of the fact that production and associated process requires many on the spot decisions. Machine handling/plant handling not only needs vigilance but also demands spontaneous decision making from the on-site employees. Many a times, a delay would cost high if a decision is not taken as per and on the situation. Executives of manufacturing firms often quote the incidence where their spontaneity saved their organizations from losses, and also saved the lives of factory and other nearby residents. For instances the cases of fire in plant, leakage from pipelines, overheating of machines, accidents in the premises, and the like require some quick decisions in the good faith of all. Comparatively, in service industry such spontaneity is not much needed.

Moving ahead, the higher Dependent DMS in youngsters as compared to senior age group was also obvious as lack of maturity cause young executives to take advices from experienced and expert. This dependence is for better execution of their duties, which is appreciable as well, provided that they rely on right advices and advisors. Moreover, higher Dependent and Avoidant styles in young experience group (i.e slightly experienced, upto 9 yrs) than high experience group (19-27 yrs) was also according the experience status. Having doubts on self decision making ability, (Salo and Allwood, 2011) the new joinees or less experienced executives avoid making decisions and depend on others for their decisions. Due to the same reason the fairly experienced group (10-18 yrs) also had higher Dependent DMS than higher experience group (19-27 yrs). But it should be noted that fairly experienced executives were not immature enough (as slightly experienced group) to avoid decisions. Avoidant style is associated with negative features, (Parker *et al.*, 2007) but being incompetent it is better to avoid important decisions, and seek advices from seniors. If so, then the extra time for taking advices reflects strive for avoiding any negative consequences.

Interestingly, the lower income group (upto 5 lacs INR) executives demonstrated higher Dependent, Avoidant and Spontaneous DMS than middle income group (5 to 10 lacs INR) executives. Likewise, the middle income group had higher Intuitive and Avoidant DMS as compared to higher income group (above 10 lacs INR). This finding was unique and it illustrated that those who earn less tend to avoid decisions, depend more on others for their decision making and decide more often spontaneously. But the middle income executives have comparatively lesser such tendencies. It entails the possibility that income has significant impact on decision making behaviors of executives. The less earning employees probably lack trust in their own decision making ability and therefore they rely on others and decide more often at the last moment. Likewise, the middle income executives have higher avoidance compared with the higher income group. But it is noticeable here that middle income executives revealed higher Intuitive style than the higher income ones. It attributes that despite of higher annual income; the executives use less intuition; whereas the middle income executives decide by their hunches, guts and inner voices. This could be due to the associated position profiles with their pay packages. The higher income group executives in the survey were associated with senior levels of organizations and middle income executives were from middle levels. The middle level executives are usually in charge (HODs/ directors/ Managers) of their departments; their decision making involve most

expertise based intuitive decisions for better performance of their respective domains. Henceforth the obtained findings add to the fact that Intuitive DMS is required in middle levels as compared to the senior levels. Although, the intuition is undoubtedly needed and utilized at strategic and senior levels also, but it can be said that individual perceptual differences would have impacted the differences in opinions (in survey questions). Thus this finding further needs investigation.

Indian female executives were found to be less avoidant than males. In other words, the male executives were more avoidant in their decision making behaviors. It implies that female executives are more sincere and punctual about their decision making tasks. Hence they displayed lesser avoidance for their important decisions. Whereas, the male executives had comparatively higher avoidance possibly due to their tendency to avoid decision until the pressure is on, or unless they receive any reminder for their decision making task. Therefore it means that men delay the decisions while women perform well in time. But here our finding is in contrast to Gati, (2010) who found that women consult more and it takes them more time to make the decision. Rassin and Muris, (2005) also contrastingly reported that women make the final decision more slowly than men because they are more hesitant. Thus we infer that Indian female executives are not hesitant to take decisions. But here it is necessary to mention that intentionally avoiding the important decisions is undoubtedly a bad tendency but if the avoidance is must, then this style is not harm. Hence the males' avoidance is subject to further verification. Moreover the findings also suggests that male and females have difference DMS(s) for approaching their important decisions. Salo and Allwood, (2011) also noticed few gender differences where male police investigators reported higher Rational DMS while female reported higher Dependent DMS, however no such differences were obtained in this study. This might be due to the difference in the sample of their and our study.

The above discussion contributes towards the importance of DMS of decision maker unlike rest of the decision making process based researches. Here the concern has been raised to pay attention to the decision making behavior and differences therein, rather than been stuck to the typical decision making models. As mentioned in the beginning of the paper that DMS are the result of models based on the relationship between personality and decision making. Therefore different individuals may have varied DMS while dealing with the same problem. Hence, the discussion here primarily focused on elaborating such difference in the decision making behaviors.

Implications

The results and discussion have significant implications in general as well as specifically for practioners, academicians, researchers and others. The study highlighted the importance of DMS and thus the respondents may learn to improve upon the weak areas of their DMS profile. Academicians may imply that rather than creation of many DMS as dominant, the new job aspirants shall develop preliminary and backup styles profile. The new job aspirants can be told to possess correct decision making behavior for their aspired career profiles. This would in turn create the pool of correct human resources to the labor market and organizations. Moreover the maintenance of the current DMS profile in the existing workforce is also essential and the role of practioners thus becomes significant. The training programs, transfer and rotation decisions, counseling sessions, reengineering projects etc could be derived of the requirement placed by the obtained DMS profile. Further the indicated possibility of association between the styles suggests developing decision making approaches for various situations, and the same may be adopted to deal with identical eventualities. The executives of manufacturing industry should learn to be spontaneous, the youngsters should understand the importance of right advice and time, the male executives should try to lower their avoidant DMS. The income effect in the results was somehow new but from it we may infer that the organizations should maintain the

equality of remuneration at same levels. Any form of unjustified income discrimination should thus be avoided in order to make the employees self sufficient and punctual in their decision making tasks. The researchers may take on the task of further investigating into the revealed facts and should seek scope in DMS research. Therefore this study certainly revitalized the decision making research from behavioral perspectives.

Conclusion

The decision-making style (DMS) is useful to understand managers, their decision-making, their problem solving and their ability to interact with others in the organization, (Rowe and Boulgarides, 1992). Therefore this study contributed towards understanding the executives of India and their decision making/problem solving ability. It discussed the obtained DMS profiles, (Scott and Bruce, 1995) of Indian executives and derived several implications in general and specific. Primarily the correlation amongst the style indicated that a decision-maker may rely on more than a single style. Also sometimes the decision makers may choose a combination of styles in a decision making (i.e. one as primary and other as secondary). The highest (Preliminary) Rational style and back up of Intuitive and Dependent style was justified. This answered the *RQ1*. The major DMS of Indian executives came out to be Rational, Intuitive and Dependent DMS while the minor styles were Spontaneous and Avoidant. Likewise the correlation amongst the styles answered *RQ2* as "Yes". That the Indian executives are flexible in decision making and this flexibility adds to their better decisions. Therefore flexibility is preferred over stringency by Indian executives. Executives shall have backups of good DMS(s) to take better decisions. The investigation in the significant difference of styles across personal and contextual attributes led us to answer the *RQ3*. Here also the answer was "yes". There existed a significant difference in DMS across Sector, Organization Type, Industry, Age, Experience, Annual Income as well as Gender. The discussion in the study highlighted why the differences were so. The interesting findings included differences in Avoidant DMS of males and females, and the higher Intuitive DMS of Middle income group as compared to Higher Income group. However, almost all the Income based variations need further verification. This study therefore contributed towards the literature on DMS and highlighted the concern for DMS research. It was one of the pioneering efforts to revitalize the decision making from behavioral perspectives in Indian contexts.

Limitations and Scope for Future Research

This research has limitations in the form of biases associated with self reporting survey method. The respondents' personal self serving biases might have manipulated their responses. Also the convenience based data collection caused the chances of insufficient and incorrect representation of the Organization type (Public/Private), Sectors and Industries. Thus the findings cannot be generalized to the entire Indian executives' population. The online data collection method also subjected the responses to the doubt of personal or impersonal responses. However, the face to face data collection method did not have any possibility of impersonal or third party helps in responding. Future research in this direction may overcome the mentioned limitations. Increased representative sample and more in-depth study on the subject matter would definitely turn the new milestones. The researchers can check and validate new concepts by going in details. The verification of income effect and gender differences is also a scope for future. Moreover a cross sector, cross industrial and cross cultural study on DMS is also expected and feasible.

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