

Cognitive Dynamics in Decision Making Among a Population Group of South-West India

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Abstract

Decision making can be regarded as the mental progression resulting in the choice of a path of action among some alternative scenarios. Every decision making process produce a final choice. The output can be an action or an opinion of choice. Decision making is one of the basic cognitive processes of human behaviors by which a preferred option or a course of actions is chosen from among a set of alternatives based on certain criteria. Everyday, people are inundated with decisions, big or small. Understanding how people arrive at their choices is an area of cognitive psychology. The sample size obtained from the study was 364 Muslims including both males and females from Bengaluru, Karnataka, using Interview schedule. The findings concluded that Females take much longer in taking a decision and reflect and regret more on the consequences of their decisions as compared to the males.

Keywords

Decision making, cognitive processes, human behaviors, mental progression.

Introduction

In common parlance, cognition refers to a range of mental activities involved in receiving information, storing, comprehending, retrieving and using it. Gabbard (2004) stated that cognition as “an integral part of perceiving, recognizing, conceiving decision making, reasoning and varying any of the perceptual-conceptual processes”. Decision making is one of the basic cognitive processes of human behaviors by which a preferred option or a course of action is chosen from among a set of alternatives based on certain criteria. The neuroscience of Decision making provides a neural “road map” for the intervening physiological processes between knowledge and behavior, and the potential interruptions that lead to a disconnection between what one knows and one does not. An individual’s behavior is in large part modulated and patterned by the way, he thinks, perceives, diagnosis, evaluate and interpret his physical and social environment. An individual’s way of perceiving the universe around is filtered, through the cognitive- map and their system

of beliefs. The term cognitive- map has been used for the first time by Tolman (1948), which is referred to as the concepts about aspects of the decision-making environment and beliefs about cause and effect relationships between them. Such maps thus serve as an interpretive lens for taking decisions.

Decision making is fundamental to modern life in its individual, collective and corporate aspects. A decision may be irreversible, its consequences can be serious and far – reaching, and it is often made in the public eye where one’s actions are open to scrutiny. Decisions vary in their seriousness and in the extent to which they are involving. One can envisage a continuum from crucial, literally life/death decisions, to mundane choices. Decisions vary widely in importance for the decision maker. A “good” decision is one in which the best available course of action is chosen in the face of characteristic uncertainty about the consequences. To complicate matters, often our decisions are additionally dependent Many decisions are unimportant, such as everyday purchases such routine actions, which need little thought. Other decisions require active reasoning aimed at acquiring a satisfactory representation of attractiveness of options. Decisions are important when high costs are involved or when an outcome has far-reaching consequences (eg. the choice of a career).A decision may also be important when it relates to a significant opinion or emotional value.

Decision Making Model:

Using a step by step decision making process helps us to make more deliberate thoughtful decisions by organizing relevant information and defining alternatives. The approach enables us to better insure the chances of choosing the most satisfying alternative possible. There are seven steps in effective decision making.

- Identify the decision to be made
- Gather relevant information
- Identify alternative
- Weigh the evidence
- Choose among alternatives
- Take action
- Review decision and consequences

Review of Literature

Decision making

Everyday, people are inundated with decisions, big and small. Understanding how people arrive at their choices is an area of cognitive psychology that has received attention. Several factors influence decision making. These factors, including past experience (Juliusson, Karlsson and Garling, 2005), cognitive biases (Stanovich and West, 2008), age and individual differences (Bruin, Parker, and Fischhoff, 2007), belief in personal relevance (Acevedo, and Kruger, 2004), and an escalation of commitment, influence what choice people make. Understanding the factors that influence decision making process is important to understanding what decisions are made.

- Reiter (2013) research study was undertaken to test the gender differences when they had to take a decision, for which multiple options were placed before the college students. It was tested by measuring the amount of time, students took to choose a food line to wait in at the cafeteria, suggesting that males would not spend as much time observing all of the different options as females would. 116 male students and 116 female students from two separate cafeterias on two different campuses participated in the study. The researchers found that when males had formed a routine and were in their more natural environment, they were quicker to choose a line than females, but when in a less familiar situation, males and females did not significantly differ in the amount of time it took to choose their food line.
- Missri (2008) conducted study to evaluate the differences between men and women in foreign policy decision making. The findings brought forth, that both men and women have similarities and differences in various aspects of the decision making process. Women have fewer biases under a controlled environment in a decision matrix consisting of two alternatives. In less cognitively demanding situations, women will present less biases than men, while when decision problem becomes more cognitively demanding, both men and women have the same amount of biases.
- Maria et al, (2007) research investigation shows that there are significant sex and age differences in the decision processes of the participants of this study i.e., depending on their ages, the participants do not behave in the same way when they make decisions, because the relevance they allocate to the task, the decision maker and the environmental factors that determine the resolution process is different in some aspects. Women are more concerned with uncertainty, doubts and the dynamism that are involved in the decision, whether these affect them or other people. Women are more aware of the constraints that the setting and close persons put on them and their emotions are more importance to the analysis of the information required to carry out the decision and to the definition of the goals or purposes of the decision. It was also found that there exists no sex differences were observed in cognition and self regulation.

Material and Methods

The present study was carried on Muslim population of both males and females of Bangalore, Karnataka. The sample size worked upon was 364, i.e., 266 males and 98 females and their age group being 18-60 years. Set of standardized interview schedule was incorporated as the mode of data collection to infer the variability of cognitive dimensions.

Results and Discussion

Based upon the psychological variable namely 'cognition', the inter-variation between males and females were obtained:

Table1: Distribution of Muslims based on their responses as to how easy do they find taking a decision.

Gender		Always	Mostly	Sometimes	Rarely	Never	Can't say	Total
Males	N	84	83	79	13	1	6	266
	%	31.6	31.2	29.7	4.7	0.4	2.3	100
Females	N	16	23	49	7	1	1	97
	%	16.5	23.7	50.5	7.2	1.0	1.0	100

Table1 shows maximum proportion of Males i.e., 31.6% 'always' find it easy taking a decision, while a maximum proportion of Females 50.5% 'sometimes' find it easy taking a decision.

Table2: Distribution of Muslims based on their responses whether they are fine, if someone else take decisions for them.

Gender		Always	Mostly	Sometimes	Rarely	Never	Can't say	Total
Males	N	43	39	105	48	25	6	260
	%	16.2	14.7	39.5	18.0	9.4	2.3	97.7
Females	N	9	9	42	29	8	0	97
	%	9.3	9.3	43.3	29.9	8.2	0	100

Table 2 shows maximum proportion of Males i.e., 39.5% were 'sometimes' fine with the idea, if someone else take the decisions on their behalf while much greater proportion of Females 43.3% too 'sometimes' prefer if someone else taking decisions for them.

Table3: Distribution of Muslims based on their responses, whether they are sure with what alternative they want to go ahead when making decision.

Gender		Always	Mostly	Sometimes	Rarely	Never	Can't say	Total
Males	N	68	67	85	19	22	5	261
	%	25.6	25.2	32.0	7.1	8.3	1.9	98.1
Females	N	14	16	40	11	14	2	95
	%	14.4	16.5	41.2	11.3	14.4	2.1	97.9

Table 3 shows maximum proportion of Males i.e, 32.0 % were 'sometimes' sure, with what option they want to go ahead with, while taking a decision, while much greater proportion of Females i.e., 41.2 % aswell were only 'sometimes' sure, about it.

Table 4: Distribution of Muslims based on their responses, whether they feel regret after taking a decision

Gender		Always	Mostly	Sometimes	Rarely	Never	Can't say	Total
Males	N	42	28	114	47	31	4	266
	%	15.8	10.5	42.9	17.7	11.7	1.5	100
Females	N	5	11	51	16	14	0	97
	%	5.2	11.3	52.6	16.5	14.4	0	100

Table 4 shows maximum proportion of Males i.e., 42.9% 'sometimes' feel regret after taking certain decisions while much greater proportion of Females i.e., 52.6 % as well 'sometimes' felt regret after some decision has been taken.

Table 5. Distribution of Muslims based on their responses whether they think about the society when taking a decision.

Gender		Always	Mostly	Sometimes	Rarely	Never	Can't say	Total
Males	N	60	55	78	50	16	7	266
	%	22.6	20.7	29.3	18.8	6.0	2.6	100
Females	N	22	22	33	16	3	1	97
	%	22.7	22.7	34.0	16.5	3.1	1.0	100

Table 5 shows maximum proportion of Males i.e., 29.3% 'sometimes' think about the society when taking a decision while much greater proportion of Females i.e., 34.0% as well 'sometimes' think about the society.

Table 6: Distribution of Muslims based on their responses, how frequent decisions, are made out of compromises.

Gender		Always	Mostly	Sometimes	Rarely	Can't say	Total
Males	N	57	74	110	18	7	266
	%	21.4	27.8	41.4	6.8	2.6	100
Females	N	20	14	58	4	1	97
	%	20.6	14.4	59.8	4.1	1.0	100

Table 6 shows maximum proportion of Males i.e., 41.4% 'sometimes' make decisions out of compromises while much greater proportion of Females i.e., 59.8 % as well 'sometimes' make decisions out of compromises.

Conclusion

The past study conducted by Reiter (2013), males didn't spend much time as do the females, in deciding with which option they want to go ahead with. Likewise, in the study undertaken by Maria et al (2007) Decision making depends upon the sex and age difference of the people involved in any decision making activity. From the present study

done on Muslims on Bengaluru, it was found that males 'always' find it bit easy making choices as compared to the females counterpart, while a maximum proportion of both the genders, only 'sometimes' find it easy making everyday decisions of life. It was also brought forth, that females are found to be more skeptical, when they are faced with multiple options to choose from and are completely comfortable if someone else take a decision on their behalf as compared to the males. The findings also pointed out that, more than males, females regret and felt more remorse over some of the choices they made as compared to the males counterpart. Females reflect more on the society, they live in, their family values, when they have to take any crucial decision and make more compromises than the males.

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