



**EMOTIONAL INTELLIGENCE VS  
DECISION MAKING; ARE THEY COMPLEMENTARY?  
IF YES, HOW THEY ARE RELATED?**

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**Abstract:**

Emotional intelligence refers to the ability of an individual to understand the emotions of one's own self and understanding the emotions of others. Whereas decision making is the ability of an individual to make wright choice not only at the time of distress as well as during day to day choices. Howard Gardner explained emotional intelligence is only one aspect of intelligence which is called as interpersonal and intrapersonal. According to him the multiple intelligence an individual possess collectively compliments one another in effective problem solving and decision making. In this paper the relationship between decision making and emotional intelligence is evaluated among learned population in general. In order find the relationship between emotional intelligence and decision-making, a survey was conducted among teacher sample (males and females) in the age group 25 to 55 years, average age =35.5, working in government as well as private schools in Chennai, Tamil Nadu, India. The result of survey indicated that emotional intelligence plays a significant role in decision-making highlighting the role of feeling aspect of emotional intelligence in decision-making revealing the fact that teachers are to be more empathetic in their profession.

**Keywords:** emotional intelligence, distress, decision-making, interpersonal and intrapersonal

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## 1. Introduction

Emotional intelligence of an individual played a significant role in decision making. It is proven by several research studies that emotionally balanced individual is supposed to be an individual with high Emotional intelligence (EI) takes right decisions though at times involves high risks based on the given circumstances. One of the truly practical examples is the epic of Mahabharata where the supreme lord Shree Krishna declares the Kurukshetra war as inevitable. According to scientific arguments intelligence of an individual means his/her general mental ability (GMA) responsible for complex problem-solving skills, reasoning, learning through experience, generation of indigenous ideas as well as adaptation and anticipation of environmental adversities an individual encounter in his/her life time (Neisser et al., 1996). The higher order of intelligence determines the ability of an individual to understand the world around him/her to meet challenges as well as the opportunities that the life offers (Gottfredson, 2003). Financial decision making in everyday life that every individual deal is determined by general mental ability (GMA) one of which is emotional intelligence (EI); (Agarwal, 2013). Based on the emotions an individual takes decision which is bound by positive (happiness, pride, a sense of fulfilment) or negative (guilt, fear, insecurity, regret) feelings (Keltner, 2010). An individual with high level of Emotional intelligence judges the given situation in a favourable manner lowering the anxiety and risk causing estimates (Yip, 2013). The complimentary nature of Emotional intelligence (EI) and Decision making (DM) is supported by Mayer (2008). According to him EI is a measure of individual's cognitive ability which is associated with the general mental ability (GMA), which enables an individual to facilitate thinking, understanding and managing emotions.

Daniel Goleman (1988) defines the concept of Emotional intelligence (EI) under five dimensions namely: Self Awareness, Self-Regulation, Motivation, Empathy and Social Skills. Therefore, an individual with high level of the above five dimensions might be a good decision maker. Several research studies in recent years have shown that motivational attitude of individual's play a role in decision making (Lerner JS 2015). Emotions constitute a vital force in driving the urge to judge and make appropriate decisions as well as influence risky decisions (Kusev P., 2017), lowering cognitive ability (Crane M. F., 2017), and enhancing attention (Garfinkel S. N., 2016). On the other hand, if the decision taking is undertaken amidst conflict or anger can bring down cognitive processing ability (Garfinkel S. N., 2016). Research evidence proves that decision making under emotional discomfort at times leads to reframe difficult problems through coherence shifting (Carpenter S. M., 2016). At times it is proven that decision taken out of balanced action leads to emotion which might influence other decision taken in a similar situation (Carpenter S. M., 2016). Recognising the influence of emotion in decision making, Keltner and Lerner suggested an emotion-infused choice model of judgement and decision making (Carpenter S. M., 2016). This model is based on the idea that the judgement and decision making is influenced by emotions depending on the interaction of cognitive and motivational mechanisms. Payne J. W. (1990) suggested that from

cognitive perspective individuals are capable of assessing the situations under consideration and several approaches have been used to study how emotions play a role in affective processing to take decisions (Miller, 1990). Emotions are meta-cognitive in nature, and they can cause negative feelings namely: regret, guilt, etc which would interact with rational thinking (Avnet T., 2005). According to Peters E. (2006), there are four types of markers to take constructive decisions based on the information namely: motivational, real, perceived and imaginary (Cohen J., 2008). In general individuals make decisions based on their cognitive ability analysing realistic nature as well as the perception of the information (Nowlis S. M., 2005).

Herbert Simon, a Nobel laureate, suggested that emotions influence, change the direction or at times completely takes charge of the decisions individual's counter in everyday life. Therefore, it is absolutely necessary that an individual is capable of making objective decision by knowing about their decision making. He further states that at times it is possible to make decisions without emotional bias provided the knowledge regarding the neurobiological origin of emotion is known and how they are perceived as actions with feelings. Every feeling in the human brain is caused by the stimulus either in the form of information or as a physical event. The stimulus accelerates unfelt emotion in the brain to which body responds producing hormones. These hormones enter into the blood stream causing a positive or negative feeling which in turn impacts the decision making.

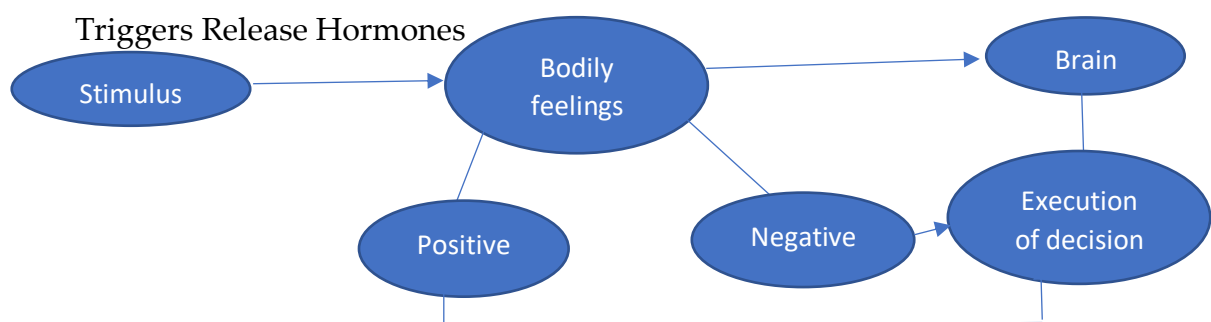
Dr. Antonio Damasio (1991), an American Portuguese neuroscientist, suggested that the brain constantly updates information about the body state in a physical environment similar to the updates of software in a computer for its proper functioning. Therefore, the brain translates the body changes as emotions to actionable feelings in an ever-changing environment for survival. When an individual encounters threat in the physical environment, the brain responds quickly to the bodily changes to produce hormones perceived as fear emotion causing feelings of action to encounter the fear allowing the body to take appropriate decision to overcome the threat in that particular moment, all this process takes place unconsciously within a short period of time. Therefore, a proper understanding regarding constant and complex interaction between emotions and the resulting action feelings improve the emotional intelligence as well as the effective decision-making ability. Lowenstein (2003) considered the role of emotions in decision-making into two types namely: anticipated emotions in decision-making and immediate emotions experienced at the time of decision making. Anticipated emotions in decision-making is when students regret on their decision in selecting a subject of choice or anticipatory feeling of happiness an individual experiences joining a weight - loss program. On the other hand, immediate emotions involve semantic decision-making related to bodily response to a stimulus at a given situation or incident oriented. According with Dunn (2006), physiological signals associated with emotions, either consciously or unconsciously, invoke bias decision-making by individuals favourable or unfavourable to the encountered situation. Pfister (2008) explained the integral role of emotions in decision-making in four different ways namely: providing information of the

given situation, speed of assessing the given information, finding the relevance of the information and commitment to take decision.

- Providing information: if an individual is stimulated with the given information, he/she responds to it based on positive or negative feeling in turn reflecting on the decision
- Speed of assessing the information: this refers how quickly the brain reacts to the bodily feelings to make quick decisions especially when the situation attracts danger.
- Assessing relevance: individual's emotion plays role in assessing the relevance of the situation, for example in a fearful environment the emotion associated is fear, danger, helplessness, uncertainty etc. This assessment drives the individual to make semantic decision.
- Commitment: refers to taking relevant decision to self as well as to the group. If an individual is a group leader it is important to take decision in the interest of others signifying human civilization, moral commitment and responsibility. Under such circumstances emotional feeling of love or guilt help an individual to take appropriate decision.

Raghunathan (1999) suggested that individual's need to consider the consequences of emotions in final decision making based on their unhappy or anxiety nature. They carried out three experiments to find the participant's ability based on gambling decision as well as job selection decision. The findings showed that unhappy subjects prefer to make decision that involve high-risk/high-reward while anxiety prone subjects tend to make decision that involve low-risk/ low-reward. Therefore, it is concluded that final decision making depends on the consequences of emotions under given situation rather than on positive or negative feeling. Bower (1981) stated that emotions that arise in a particular situation is stored in emotional memory for a short duration of time could be retrieved when a similar situation is encountered and the process of decision-making takes place unconsciously. Another study by Lerner J. S., (2004) suggests that by inducing sad feeling among the participants resulted in making a decision to sell the goods at a lower price anticipating a change to bring positive mood swing. Based on the above research studies the following model explains the link between emotion and decision-making.

**Figure 1:** Model depicting the influence of emotion on decision-making



## 2. Methodology

A survey was conducted on N = 500 teacher sample (males and females) in the age group 25 to 55 years, average age = 35.5, working in government as well as private schools in Chennai, Tamil Nadu, India. The main focus is to find the dependence of emotional intelligence on the decision making. In order to find out the dependence an instrument was constructed by the researcher based on the Mayer-Salovey-Caruso Emotional Intelligence Test as a valid standardized psychometric measure of EI behaviour to examine two key competencies of EI: (i) Strategic EI and (ii) Experimental EI. The items are modified in the present research to find the relationship between emotional intelligence and decision -making. The instrument consists of 15 items. Each and every item in the instrument is carefully stated so that the subject applies to the present situation in evaluating the instrument. The evaluation of the instrument is based six-point Likert scale with following answer key: 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, 5 = Always. The key statements in the questionnaire is given as follows.

**Table 1:** Instrument used to measure Decision making

S. No	Statements	Answer key in numeric value
1.	I generally rely on gut feeling while taking decisions.	
2.	I think pros and cons of situation before making a concrete decision.	
3.	At times I make hasty decisions and repent later	
4.	I generally plan ahead before doing a task.	
5.	I normally leave the situation if I have no option left with me.	
6.	I have difficulty to think clearly when I have to decide on something quickly.	
7.	I think logically before making a decision	
8.	I make up mind about my decision regardless of what others think.	
9.	I generally take practical decision rather than ideal one.	
10.	I often feel control of the situation.	
11.	I do look for better option even after deciding about something.	
12.	I have wavery mind getting confused about what I have to decide on a situation most of the times.	
13.	I do like to consult others before making a decision	
14.	I always stick to the choices I make.	
15.	I feel whatever I decide on my own thinking works out better rather than taking advice from others.	

Each statement is evaluating the ability of an individual in decision -making based on the general mental ability (GMA).

## 3. Research Questions

- How does cognitive ability of an individual determine emotional intelligence?

- In what way tolerance trait contribute to emotional intelligence?
- Is there a difference between individuals with reference to cognitive ability?
- Is there a relationship between Emotional Intelligence and Decision making?
- How are dimensions cognitive ability, tolerance and ego related to Decision making of the individuals?

#### 4. Analysis

The scores obtained as the result of the survey was subjected to statistical analysis using SPSS version 21 software. Factor analysis is carried out to find out the systematic interdependency of the variables with reference to latent factors that could create commonality. The items of the instrument constituted three components based on the individual's ability (GMA) to make decision based on emotion in the given situation namely: feeling, semantic ability and bias. Decision-making based on feeling was found form a strong cluster compared to the other two emotions as shown in following table.

**Table 2:** The relationship between emotion and decision making

Psychological variable	N	"r"	"R"	% of relationship
Feeling	500	0.531	0.282	28.2
		0.521	0.271	27.1
		0.570	0.325	32.5
		0.560	0.313	31.3
		0.581	0.337	33.7
		0.545	0.297	29.7
		0.562	0.316	31.6
		0.607	0.368	36.8
		0.633	0.400	40.0
		0.601	0.361	36.1
Semantic ability		0.484	0.234	23.4
		0.499	0.249	24.9
Bias		0.453	0.205	20.5
		0.464	0.215	21.5
		0.469	0.219	21.9

Principal component analysis of the item variables extracted five components with eigen value equal to greater than one according to Kaiser criterion. The five components of decision- making are extracted are labelled as feeling, semantic ability, bias (includes momentarily and similarity to previous decision).

**Table 3:** Result of Principal component analysis

Item variable	Principal component 1 (feeling)	Principal component 2 (semantic ability)	Principal component 3 (bias)	Principal component 4 (momentarily decision)	Principal component 5 (similarity to previous decision)
DM 9	0.710	-0.072	-0.700	-0.570	-0.213
DM 7	0.682	-0.144	0.230	0.087	0.031
DM 2	0.663	-0.215	0.169	-0.046	-0.029
DM 4	0.610	-0.053	0.204	-0.037	-0.257
DM 8	0.536	0.104	-0.392	-0.132	0.031
DM 14	0.493	0.246	-0.358	-0.116	0.256
DM 10	0.492	-0.607	-0.024	0.443	-0.072
DM 12	-0.104	0.707	0.081	-0.289	-0.092
DM 3	-0.077	0.578	0.117	-0.164	-0.431
DM 6	-0.111	0.577	0.069	0.454	0.149
DM 15	0.247	0.331	-0.673	0.135	0.132
DM 5	0.154	0.355	0.235	0.561	0.203
DM 1	0.231	0.186	0.096	-0.487	0.426
DM 13	0.296	0.214	0.494	-0.138	0.497
DM 11	0.307	0.391	0.135	-0.044	-0.448

The results of Table 3 explain that five components are extracted from the factor loadings by principal component analysis. The items 9,7,2,4,8,14,10 are loaded to a maximum in component "1" representing the emotion feeling, the items 12, 3, 6, 15 are loaded to a maximum extent in the component "2" representing the emotion semantic ability, Item 13 is loaded to component "3" representing the emotion bias, item 5 is a complex one loading in component "4" representing momentarily decision and in component "2" . Items 1 and 13 represents component "5" representing the emotion similarity to previous decision. Item 11 is a complex item showing significant loadings in components 1 and 2. The component transformation matrix explains based on item loadings subjected to varimax rotation indicates that 88.4 % of items evaluates emotion (feeling) in decision-making. The rest of the emotions namely: semantic ability, bias, momentary decision making and similar to previous decision are 41.6%, .15.4%, .79.5% and 68.6% respectively. The results indicate that the individuals take decision based on emotion (feeling) when triggered by the stimulus. There is innumerable research evidence indicating that emotion play a major role in individual's decision-making.

**Table 4:** The component transformation matrix for the loaded items after varimax rotation

Component	1	2	3	4	5
1 (Feeling)	0.884	0.416	-0.001	0.056	0.204
2 (Semantic ability)	0.231	0.314	0.750	0.480	0.233
3 (Bias)	0.279	-0.823	0.154	0.235	0.407
4 (Momentary decision making)	0.094	-0.053	-0.297	0.795	-0.518
5 (Similar to previous decision)	-0.279	0.218	-0.570	0.281	0.686

The principal component analysis carried out on factors extracted five components based on the eigen values > or = 1. These five components explain total variance across the items. The results of Table 5 show that the total cumulative variance of the component 1 is found to be around 17 % indicating that most of the items in the instrument evaluate the emotion (feeling). Therefore, decision-making by the individuals based on earlier experience is found be very uncommon showing the fact that the individuals depend mostly on their feeling to given stimulus or semantic ability.

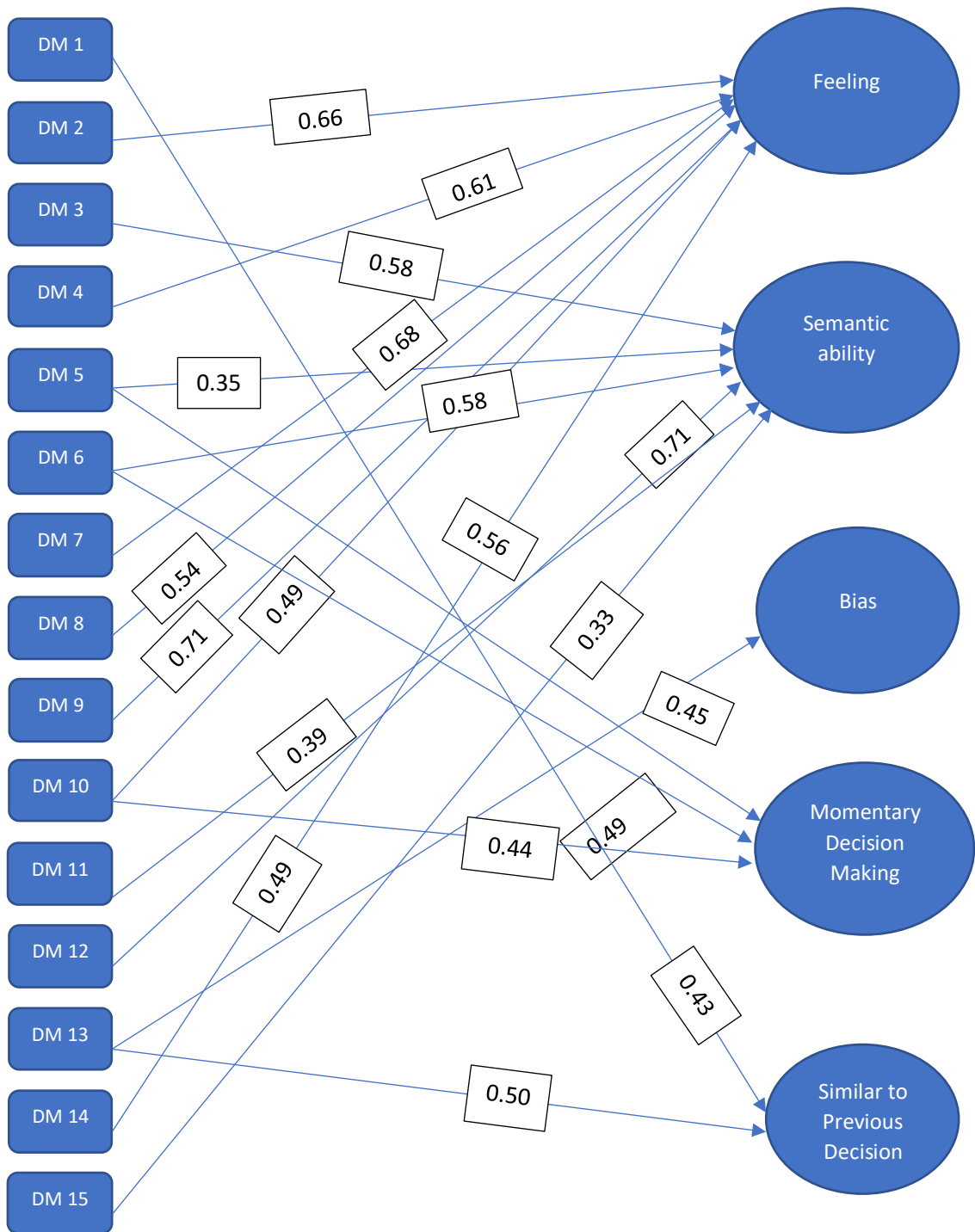
**Table 4:** Shows the total variance observed by each factor across the five components extracted before and after rotation of factor loadings

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1 (Feeling)	2.902	19.344	19.344	2.554	17.025	17.025
2 (Semantic ability)	1.786	11.909	31.253	1.557	10.380	27.405
3 (Bias)	1.214	8.095	39.348	1.490	9.935	37.340
4 (Momentary decision making)	1.148	7.655	47.003	1.300	8.667	46.007
5 (Similar to previous decision)	1.091	7.271	54.273	1.240	8.367	54.273

Figure 2 shows to what extent each factor evaluating decision making is loaded determining the component of emotion by means of path diagram. From the path diagram it is shown that the items 9,7, 2, 4, 8, 14, 10, 11 are loaded more than 33% determining the component 1. Items 12, 3, 6,15, 5,11 are loaded more than 33% determining the component 2. Item 13 is loaded to greater extent determining the component 3. Item 10, 6, 5, 1 are loaded determining the component 4. Item 5 determines the component 4 to greater extent than component as seen from the corresponding loaded values, similarly item 10 determines component 1 to a greater extent than component 4. Item 1 and 13 are loaded to determine the component 5. The factor analysis of the items by using principal component analysis method prove the dependence of emotion in decision-making. Daniel Kahneman suggested similar findings in his research stating that decision to be taken by assessing the situation and not always relying on gut feeling. Another study by Christine Ma-Kellams explains that the decision involved in recruiting employees, the employer does it more precisely when he/she is involved in a systematic thinking process rather than relying on individual's intuition.



**Figure 2:** Path diagram showing the communalities of items with the extracted components



## 5. Results and Discussion

The tables 1, 2,3, and 4 shows the effectiveness with which the items determine the role of emotion in decision -making. The research study reveals that in general individual make decision based on feeling as well as semantic ability. At times there happens bias feeling, momentary reaction to the stimulus. The overall finding is emotional intelligence play a vital role in decision-making. Emotional Intelligence and Decision making are complimentary to each other as we could say that Emotionally strong individual makes a better choice at the time of distress as well as under normal circumstances. George (2000) carried out a research study to find the influence of emotion in decision-making of individuals having leadership capabilities namely managers. The result of the study revealed that managers experiencing negative mood at work performed poorly compared to their subordinates experiencing positive mood boosting their quality of consumer service.

Goleman (1998) suggested that it is necessary examine the root of the feeling which reflects the fundamental ability to make decision. Cherniss (2003) stressed the role of emotional intelligence in decision -making which should become integral character of the Educators in turn teachers at all levels to boost the economy of a country. Similar research studies by Salovey and Grewal (2005) suggests the skill of perceiving emotion, understanding emotion and managing emotion in the decision-making process. Therefore, an individual has to acknowledge that emotion is critical in determining the motivation behind a decision as well as its impact on others. Huy (1999) pointed out that decision-makers who perceive and understand their emotions will be much more effective in warding off potential negative outcomes emerging out of the emotions in effective decision-making process.

Hess and Bacigalupo (2011) suggested that the organizations and individuals using strategies to effectively improve emotional intelligence develop better decision-making skills as well as understand the results of adverse decision -making. The research finding has clearly shown that an individual with sound emotional intelligence avoids making decision based on emotional biases, at the same time with low emotional intelligence might create anxiety leading to poor decision-making. Hence, recognizing emotion is very important in good decision-making. The above-mentioned research studies support the role of emotion in decision-making as the result of survey conducted on teacher sample.

## 6. Conclusions

Recent research studies suggest the importance of emotional intelligence in decision-making. Emotional intelligence the ability of awareness and understanding the emotions of the self as well as others are capable of analysing cause-effective relationship of the events to take appropriate decisions. Researchers at Cornell university suggested that decision -making is a skill which could be improved like any other skill; however, it is

necessary to understand the factor that influences the current decision in order to make better decisions. Innumerable case studies have shown that negative emotions resulted in bad decision-making in comparison to the decisions taken in an understandable circumstance. Emotions are the tools individuals possess “innate” which has to be refined meaningfully by establishing relationship with others as well as the ability to understand and manage it. Hence, it is concluded that emotional intelligence plays an important role decision-making.

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