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## **Title :- EMOTIONS & DECISION MAKING**

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**Research Question :-** To what extent emotions influence our thinking and decision-making?

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## Introduction

Emotions that one experiences every day will cause one to take action and affect one's decisions about one's life. A human's life would be very dull if they did not have emotions. Primarily, our emotions ride us — excitement, happiness, calm also Anger. That's why it's important to consider the emotions that pose such a crucial part of how do we behave. In today's world, where people are dealing with the constant global problem of Mental illness, we need to understand the importance of studying emotions and how it affects how do we perceive information and make our decisions. In this extended essay, I will attempt to explain a small part of how emotions influence our daily decision-making ability. However, there are many aspects in which emotions can be studied. Taking into consideration the fact of how the global pandemic has affected us, studying emotions is an important consideration so that we do not fall into the category of mental illness. It is interesting to note the overwhelming emotions being felt by individuals and masses in the ongoing Novel Covid-19 pandemic. As the Covid-19 pandemic evolves, so do our feelings. These are unusual and difficult times as we hear about the extent of COVID-19 from all the places. The most natural emotion experienced by everyone is Fear and Anger. It gets us anxious, worried, and frustrated and can also reach us to think, speak, or do something that we might not consider relevant under typical situations. We need to study emotions for understanding the reason behind your emotion, to help ourselves feel more in control, emotions can help us make decisions, and emotions also allow us to understand others better. Decision making is the method of recognising and choosing options based on one's values, beliefs, and preferences. Emotions can affect not only the nature of one's decision but also the pace at which one makes it. Anger can drive to impatience and rash decisions. If one's excited, he/she might make fast decisions without thinking about the implications. While if one feels afraid, one's decisions may be clouded by doubt and caution, and it may take you longer to choose.

Psychologist Paul Eckman suggested that six basic emotions are universal; he expanded this list later. Robert Plutchik proposed another emotion analysis system is known as the “wheel of emotions.” Based on the above and holding that the research problem is the basis for the development of a study, showing its purpose and importance, the present work is focused on the following question: Do emotions and feelings influence the decisions making ability and problem-solving skills? Hence, the main goal is to verify whether emotions have a different effect when it comes to decision making and how does it influence our decision

making and problem solving power. Therefore, the study investigates whether emotions such as affection, disgust, enjoyment, happiness, love, relief, loneliness, heartbroken, gloominess, worried, doubtfulness, nervousness, anxiousness, annoyed, frustrated, criticism, surprise, sadness, and many more have a different impact on the decisions of people. The structure of my study will be, firstly, I will be explaining what emotions are with the definitions, and components continued by experiments and studies of how emotions influence our decisions, and will also be exploring the major themes based on which our judgments and decisions are cast, later I will be talking about anger and the Appraisal-Tendency Framework (ATF), in at the end, concluding with the summary.

## What are 'Emotions'?

Emotions that ordinary human experience is a type of affect, other examples are moods and feelings. As per the American Psychological Association (APA), emotion is “a complex reaction pattern involving experiential, behavioral, and physiological elements.” Emotions are how a person deals with a situation they find personally meaningful. Emotions are interpreted as either state or as processes. When recognized as a state like being mad or happy, emotions are a type of mental state that associates with other mental states and leads to several behaviors. Emotions can be short-termed too, like a flash of displeasure at someone for a few seconds, or long-lasting one, as enduring sorrow over the loss of a loved one. Researchers have also observed that people with specific types of brain damage affecting their ability to experience emotions also have a reduced capability to make the right decisions.

Feelings arise from emotional experiences as people are conscious of their experiences, such as hunger or discomfort. Feelings are the outcome of emotions, and they may also be influenced by thoughts, faiths, beliefs, and memories.

Emotions are frequently considered as consciously experienced and intentional. At the same time, the moods are described as “any short-lived emotional state, usually of low intensity that doesn't occur in answer to something a human experiences” by the American Psychological Association, moods alter from emotions as they lack stimuli and hold no distinct starting. The mood might not be consciously perceived and does not carry the deliberately linked emotions (Beedie, Terry, Lane, & Devonport, 2011).

The primary emotions are defined in large portion by the oldest section of the brain, limbic system, including the amygdala, hypothalamus, and thalamus. To correctly understand emotions, it is crucial to understand the three critical elements of emotion. There are three components: a subjective experience. All emotions start with a stimulus. Regardless of the culture, and raising of an individual, all individuals basic emotions can be highly subjective. Experiences can vary from as simple as to see a colour to something as significant as to lose a loved one.

A physiological response (how your bodies react to the emotion), the physiological responses are the results of the autonomic nervous system responding to the emotions an individual experiences (Or, as to Cannon-Bard theory of emotion, we sense emotions and

experience physiological effects simultaneously). It controls our involuntary responses, and regulates the fight-or-flight response.

And a behavioral or expressive reaction (how you behave in response to the emotion). This aspect of the emotional response is the actual expression of the emotion. The behavioral response includes a smile or a sigh with many other reactions, depending on social norms and character. Researchers imply that many facial expressions, such as a frown that indicate sadness play a key role in our behavioral responses.

## EMOTIONAL INFLUENCING DECISION MAKING

Studies on emotion and decision making, there are seven major themes of scientific analysis that arose. The themes show fast progress in outlining the psychology of emotion in context to decision making. Collectively, all explain one overarching outcome: emotions pervasively, predictably, and powerfully influence an individual's decision-making.

### **Theme 1: Integral emotions influence decision making**

While studying the area to classify discrete kinds of emotion, emotions flowing from decisions or choices (integral emotion), actively shapes decision making (Damasio 1994, Greene & Haidt 2002). When one makes decisions, one tends to think of rational analysis as sincere and gut feelings as deceitful. For instance, if one is trying to decide whether to ask for a promotion, and the thought of not asking fills one with regret that is an integral emotion. Somebody who feels grateful to an organization that she was part of, may decide to donate a substantial sum to it even if it limits her expenses. Such results of integral emotions function at conscious and non-conscious levels.

Notwithstanding emanating from the decisions, integral emotions also debase decision making. For example, people sometimes are afraid to fly, and henceforth, they decide to drive instead, even though they do know that rates for death by driving are higher than those for the deaths by flying (Gigerenzer 2004).

Emotionally impaired victims who have sustained injuries to the ventromedial prefrontal cortex (VPC) are vital for integrating emotion and cognition. Studies conducted show that neurological impairments decrease both victims' capacity to feel their emotions, and the optimality of their decisions in forms that cannot be described by simple cognitive changes (Bechara et al. 1999, Damasio 1994). Participants with (VPC) damages regularly pick a more dangerous financial choice over a safer one, even to the time of bankruptcy, despite their cognitive knowledge of their sub-optimal decisions.

### **Theme 2: Incidental emotions influence decision making**

Incidental emotions widely transfer from one situation to another, influencing decisions from a normalizing prospect, remain irrelevant to the emotion (Han et al. 2007, Keltner & Lerner 2010, Pham 2007, Vohs et al. 2007, Yates 2007), The method referred to as the transfer of incidental emotion (Bodenhausen 1993, Loewenstein & Lerner 2003). For

example, Anger makes one hot-headed, kicks them to pick long leads over secure bet, yield to stereotypes, and makes them less likely to listen to advice.

In incidental Anger, the Anger portrayed by the person may lead to other situations that might not even have any connection with the reason for the Anger (Quigley & Tedeschi 1996). Besides, without any awareness, the carryover of incidental emotions typically befalls. Studies on carryover either implicitly or explicitly used a valence method, separating emotions into two categories, positive and negative. Then saying emotions having the same Valence might have comparable effects: people who are in good moods will make confident decisions, and people in bad moods will make pessimistic decisions (Han et al. 2007, Keltner & Lerner 2010, Loewenstein & Lerner 2003).

### **Theme 3: Specific emotions influence decision making (Beyond Valence)**

Studies on Emotions and Decision Making took a valence method, but such designs could not consider all influences of the effect on the decisions. Valence designs lose specifications by neglecting data that emotions of similar Valence differ in crucial ways. For example, emotions of the same Valence, like Anger and sadness, are linked with different precursor assessments (Smith & Ellsworth 1985), intensities of processing (Bodenhausen et al. 1994b), etc. A more accurate method was needed to explain the relationships between emotions and decisions (Mellers et al. 1998).

As per the above statement, Lerner and Keltner (2000, 2001) suggested studying multi-dimensional distinct emotions with the *Appraisal-Tendency Framework (ATF)*. The Appraisal-Tendency Framework (ATF) as a foundation for characterizing the effects of particular emotions on decision making and judgment. The ATF believes that specific emotions give rise to precise cognitive, and motivational processes that value each emotion's impact on decision-making. The method predicts how emotions of the same Valence can use different influences on choices and decisions. Indifference, emotions having an opposite Valence can exert related influences. Five principles have emerged in experimental tests of the Appraisal-Tendency Framework (ATF).

(a)Integral and Incidental Emotions, (b)Beyond Valence, (c)Appraisal Tendencies, (d)Matching Constraint, and (e)Deactivating Conditions.

In this sense, emotions protect cognitive processing by triggering time-tested answers to cosmic experiences (Levenson 1994, Tooby & Cosmides 1990). For instance, while Anger triggers the aggression and fear triggers the flight, the fundamental relational wrong or good



that underlies various specific emotions. Researchers started that researches should compare emotions that are highly distinguished in their evaluation themes on decisions and choices (Lerner & Keltner 2000).

#### **Theme 4: Emotions form decisions with the content of a thought**

Many of the evaluation dimensions include ideas that have been basic to Decision Making the analysis, the observed probability of events and assignment of responsibility, and causality. Suppose two models, how emotions shape the content of thought by appraisal trends (Lerner and Keltner. 2000). There are two sets of emotions with the same Valence that is highly distinguished in their primary appraisal themes on decisions compared to the appraisal themes. The four emotions can be designated in courses of six emotion appraisal dimensions classified by Smith and Ellsworth (1985): attentional activity, certainty, pleasantness, control, others' responsibility, and anticipated effort. The Appraisal-Tendency Framework divines that dimensions in which emotions score particularly high or low are prone to initiate an appraisal tendency that influences decisions.

For example, Anger will have a higher score on the dimensions of control, certainty, and others' responsibility, and a lower score on pleasantness. It suggests that angry individuals might see adverse events as predictably made by and below the control of distinct humans.

Indifference, fear will have a low certainty and a less sense of control, which are prone to create a judgment of adverse events as unpredictable and situationally defined.

The differentiation in the appraisal tendencies is especially relevant to risk plan with fearful individuals leading to see higher risk and angry people favouring to view fewer risks.

#### **Theme 5: The depth of thought shapes the emotions of an individual**

Influencing of the Emotions also happens due to the depth of knowledge processed as related to decision making. According to studies conducted, the impacts of the positive and negative mood (Schwarz 1990, Schwarz & Bless 1991), If emotions assist as an adaptive part by indicating if a circumstance requires further inspection, both hypothesized that the negative mood should mean threat and, therefore develop careful, methodical processing. And a positive mood signals a safe and secure atmosphere and starts a more heuristic processing.

Various studies showed us that individuals in positive effective times were more extra inspired by heuristic ideas, like the attractiveness, expertise or likability of a cause, and space more than any quality of message; by relying further on stereotypes (Bless et al. 1996, Bodenhausen et al. 1994). Many types of research have told that extended methodical processing from negatively effected sets aggravates anchoring effects due to enhance focus on anchor (Bodenhausen et al. 2000). Likewise, opposing forces decreased the accuracy of thin-slice decisions of instructor effectiveness besides when members were below cognitive load, inferring that efficiency reduction for sad participants was prompted by higher deliberative processing (Ambady & Gray 2002).

The distinction in happiness and sadness toward the intensity of processing. In which happiness includes appraisals of high certainty and sadness of less confidence. After a series of studies, results show that high confidence emotions like happiness, Anger, disgust enhanced heuristic processing by improving trust in the cause expertise of a compelling message as exposed to the content, the growing practice of stereotypes, and decreasing application to debate quality. Moreover, manipulating certainty appraisals individually from emotion shows that certainty represents a causal part in deciding whether somebody engages in a heuristic or methodical processing.

The emotion of an individual affects the intensity of thought into the Appraisal-Tendency Framework; it has been recorded emotion influences the amount of processing over numerous domains. For illustration, relative to neutral case people, angry people designated less to welfare receivers, and sad people allocated further (Small and Lerner 2008). The effect was reduced under cognitive load, hinting that allocations were foretold by contrasts in the depth of processing among sad and angry people.

### **Theme 6: Emotions shape decisions making of an individual through goal activation**

Through discussions, emotions assist an adaptive coordination function, triggering a collection of responses (experience, communication, behavior, and physiology) that empower people to deal swiftly with faced problems or events (Keltner et al. 2014). As an individual would demand, willingness to uphold manifests not only experientially but too physiologically. For instance, Anger is connected with neural activation features of approach urges and seldom with external physiology variations that might serve one to persist, such as increased blood flow in hands (Ekman & Davidson 1994).

Emotion particular behavior trends map on appraisal themes. For model, given that anxiety is defined by the appraisal theme of handling unknown existential warnings (Lazarus 1991), it supplements the action trend to reduce possibility (Raghunathan & Pham 1999). Sadness, by diversity, is defined by the appraisal theme of undergoing an irreversible failure (Lazarus 1991). Therefore, it follows the action trend to change one's conditions, possibly by endeavoring rewards (Lerner et al. 2004). Using this argument, the researchers compared the effects of incidental anxiety and depression regarding hypothetical gambling and work selection choices. They discovered that grief exaggerates trends to support high-risk, high-reward prospects, whereas anxiety intensifies trends to help low-risk, low-reward options (Raghunathan & Pham 1999).

Experimented with the results of incidental sadness and hatred on the endowment effect (Kahneman et al. 1991), sellers consider goods more than consumers do as sellers see the business as a decline of ownership. It hypothesized that hatred, which rotates around the appraisal theme of holding too close to a conceivably poisoning object (Lazarus 1991), would provoke an inevitable goal to dismiss current things and avoid getting into anything new (Rozin et al. 2008). Compatible with the hypothesis, empirically caused incidental hatred subdued selling prices amongst participants who had the experimental thing and subdued buying prices amongst participants who did not for grief, In connection with the assessment of failure and loss, both the sale of old items and the purchase of new products offer opportunities to improve one's circumstances. Compatible with forecasts, sadness subdued selling prices but raised buying prices. In total, incidental hatred defeated the endowment impact, while incidental sadness inverted it.

The behavioral outcomes depend entirely on the recognized significance of emotion to a goal, regardless of whether it is integral or incidental to the judgment. The Appraisal-Tendency Framework does not discriminate informationally versus experiential pathways. A solid plan for future business is to generate more granular data of the devices through which emotions initiate specific goals in Decision and choice.

### **Theme 7: Emotions influence interpersonal decision making**

Emotions are naturally social, and knowing their adaptive utility needs an perception of their impact on others. As a model of how complex such events can be, individuals determine happiness solely from opportunities to help and give to others without substantial gains. Emotions serve optimally navigate human decisions.

Lerner et al. determine from the study that emotion may assist at least three roles in interpersonal decision making:

Supporting people understand one another's emotions, intentions, and beliefs.

Incentivizing or forcing a cost upon others' behavior.

Evoking complementary, exchangeable, or shared emotions in others.

Anger indicates a passion for behavioral adjustments, such as feelings of rage, prompt grants from negotiation partners, and cooperative approaches in trade games. As contrasted to Anger, a disappointment to produces more cooperation.

This result is tempered by contextual variables, such as the motive and strength of interaction partners to prepare emotional knowledge (Van Kleef et al. 2004). It is also the probably charged type of negotiation (Dehghani et al. in press). Multi-party reports show various effects; for instance, expressed Anger can drive to exclusion in these contexts (Van Beest et al. 2008).

Decision takers try to do the emotional communications of trade partners as causes of strategic data (Andrade & Ho 2007). Developing theories of how emotion intercommunication affects others' decisions also boosts the chance for the strategic sample of emotional feelings. Studies reviewing this opportunity have yielded mixed conclusions: Though such plans can assist more meaningful concessions (Kopelman et al. 2006), inauthentic displays that are recognized are met with raised demands and decreased trust. For example, original work (Elfenbein et al. 2007, Mueller & Curhan 2006) proposes that emotionally sensitive individuals should be a better fit to excite desired emotions from matches and, hence, might use such skills to obtain desired results.

## Anger and the Appraisal-Tendency Framework

Recent researches assume that all negative emotions suit so valence-congruent models. Primarily, studies exploring emotional effects on evaluation, attribution, and judgments, including risk, all exhibit that anger has discrete effects. Anger can improve self-conceptions, despite being commonly perceived as negative emotions (Lerner & Keltner, 2000).

Lerner and Keltner (2000) proposed an evaluation-tendency structure (ATF) to identify the influence of different emotions on judgment and decision-making. As mentioned before, the ATF makes two significant theoretical assumptions. First, it believes that a discrete set of cognitive dimensions distinguishes emotional knowledge and effects. For instance, an individual may become angry when appraising that a person, as opposed to natural forces and with the sound mind, stole a bag. By difference, one displays sad emotion if natural forces rained on the bag and ruined it. Next, the ATF believes that emotions automatically trigger a set of responses (behavior, physiology, communication, and experience) that allow a person to deal with problems or opportunities promptly.

The ATF prophesies that every emotion conveys the motivational characteristics that fuel holdover to succeeding judgments and decisions of an individual. Emotions also give origin to an absolute cognitive inclination to estimate future cases with an "appraisal tendency," or a goal-directed method through which emotion influences judgment and decision until the new emotion query is solved.

Preferably then closing down a decision, emotions candid thought, memory, and judgment to the emotion-eliciting case and unrelated events are often described as the carryover of incidental emotion (Bodenhausen, 1993; Loewenstein & Lerner, 2003). For instance, accidental anger triggered into one situation can automatically extract a reason to accuse in other circumstances (Quigley & Tedeschi, 1996).

As per ATF, biological stress reactions can rely more on whether an emotion is linked to an individual authority's insight and predictability than on whether an emotion is related to negativity. These diagrams indicate that the ATF is likely to be used to make precise predictions of the optimal styles in which indignation differs from other emotions of the same meaning. Certainly, a notably consistent figure of anger has developed from investigations that have studied the experience of anger and its associated appraisals (e.g., Lazarus, 1991; Ortony et al., 1988).

Precisely, anger has been connected with a feeling that the person has been offended or hurt (Lazarus, 1991), by a sense of belief or conviction about the angering situation and anything caused it, and among the assumption that different person was liable for the case and with the idea that one can still affect the situation or cope with it (Ortony et al., 1988; Weiner, 1980). By difference, people can have entirely different sets of appraisals about adverse events more commonly and thus encounter mixed negative emotions. For instance, when one blames an adverse situation on situational forces, they are more prone to feel sad than angry. If one feels responsible for an adverse event, he may sense guilt and shame rather than anger (Neumann, 2000). And if someone feels doubtful or lacks confidence regarding the cause of an adverse event, they are likely to encounter fear and anxiety rather than anger. Therefore, in the event of well-practiced anger, as infrequently replicated family circumstances, anger can become automatic and require a little evaluation. Even if anger or another emotion is not elicited by an appraisal method, it can, however, activate the appraisal system, occurring in appraisal-consistent judgment.

If one considers others to be responsible for an adverse result, the more rage one experiences (Quigley & Tedeschi, 1996). Because the sense of anger involves a sense of certainty and power of or liability for any adverse effect, people's thoughts of these aspects of following conditions are influenced by their anger encounter. And because anger has unique relationships with control, certainty, and responsibility, its impacts on judgments related to these dimensions will be separated from other adverse emotions.

## Conclusion

Major conclusions which I came across from the study on emotion and decision making include:

Emotions are becoming consistent and robust decision-making drivers. Emotional causes are not spontaneous or epiphenomenal. Emotional effects on judgment and decision-making may take the form of essential or incidental factors, with incidental emotions frequently resulting in unnecessary and unconscious emotions. The theories that create predictions for individual emotions tend to provide a more detailed account of judgment and decision-making outcomes than those that produce positive versus negative moods.

Emotions that affect decisions by multiple mechanisms, there is significant evidence that effects happen through changes in (a) thinking content, (b) depth of feeling and (c) implicit target material — three devices summarized in the ATF. Whether a particular emotion eventually enhances or degrades a specific judgment or decision depends on the connection between the cognitive and motivational devices prompted by each emotion and the default mechanisms that make every judgment or decision. The field of emotion and decision-making is that at an accelerated pace, but most sub-areas include few competing hypotheses, whereas other areas remain mostly unexplored. There are also several primary concerns about human nature in the study pathways ahead. The field has collected enough data to move toward a general model of affective influences on decision making.

The research and the results discussed here form an essential basis for understanding human decision-making and much of human activity as a whole.

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