The Role of Emotion in Tourism Ethical Decision Making

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Abstract: Emotion is the most important element in the life of species on this earth. Research on animals and humans shows that emotional experiences facilitate the learning process and the experiences formation that are useful in anticipating future events. The emergence of threats or changes from the environment requires the anticipation of adaptive behavior. Emotions provide certain signals that cause the individual to avoid unpleasant consequences. The phenomenon of intuition, for example, has long been documented in ancient Greek writings, namely Phaedrus. In that work, Socrates, a famous Greek philosopher tells that he seemed to get his heart when he was about to make a mistake. By following his conscience, Socrates can avoid fatal mistakes. For humans, the unpleasant consequences of a decision are not only on physiological matters - as is the case with animal species, but also include the social context. For example, conducting regulation of behavior so that it is always in accordance with the social norms of society. Thus, the emotional capacity is one of the assets that is useful in maintaining that individuals can always behave in a balanced way in society.

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1. Introduction

Unlike at the time of its initial development, now the emotional entity is no longer seen as a single subjective experience. Instead, emotion is defined as an integrative and harmonious process between physiological reactions - among which the nervous system and brain are involved. According to James Lange's theory of emotions, these physiological changes ultimately lead to subjective perceptions which became known as emotions. The different subjective interpretations of this particular event are ultimately interpreted as emotional labels [1]. Although there are a variety of emotional expressions that are known to ordinary people, at least studies show that there are only six universal emotions, namely: happiness, sadness, anger, fear, surprise, and disgust. It is called universal because even isolated ethnic groups who have never interacted with outsiders are able to show these six emotional reactions [2].

Emotions usually arise as a result of a specific object or event. Emotional experiences usually begin with sensory information that is captured by our senses and channeled to the
part of the brain that is responsible for emotional processing. This process usually runs quickly in a matter of milliseconds [3]. Often we generate reflex responses caused by emotional stimuli, for example running away when we see an object such as a snake slithering on the ground. This reflex response we often do before we know clearly what object was. This happens emotional information processing is faster than cognitive information processing [4].

There is empirical evidence that comes from studies involving both human and animal subjects, that the initial processing of emotions occurs in the sub-cortical brain region, namely in the limbic system region centered on the amygdala. Furthermore, the amygdala is widely recognized as the part of the brain that is responsible for processing emotions, be it fearful emotions, happy, and other kinds of emotions. In the context of more complex emotional processing, for example emotional regulation based on a cognitive approach, the emotional signals generated by the amygdala are transmitted to other parts of the brain, such as the prefrontal cortex [5].

It is important to note that this limbic system is common to a wide variety of vertebrate species as well as humans. Biology shows that this limbic system is an early product of evolution, whereas the area of the brain used for cognitive thinking, namely the frontal lobe including the prefrontal cortex has only recently emerged. This indicates that emotion is actually an instrument that has been around for a long time since ancient humans, which is very much needed in survival [6]. There is even anecdotal thought that because this emotion has been "around" for a long time, it is possible that emotion is more powerful than logic that only recently emerged.

How does the brain detect emotions? Research shows that the amygdala is involved in emotional processing by making use of several visual cues, such as facial expressions. Furthermore, by focusing on the eyebrows and lip lines, humans can detect the emotions of their interlocutors [6]. Thus, this set of emotion detectors allows individuals to get feedback by seeing the facial expressions shown by their interlocutors. Damage to the amygdala makes it difficult for individuals to adapt to their social environment [7].

Apart from the aforementioned parts of the brain, brain lateralization also plays a role in the detection of emotional stimuli. The right hemisphere of the brain was found to be more sensitive to emotional stimuli. Damage to the right part of the brain will cause the individual concerned to have difficulty detecting which person can be trusted (trustworthiness) just by looking at their facial expressions [7]. Furthermore, it was found that individuals who had damage to the right hemisphere of their brain were generally able to recount experiences and events in their past as well as normal people. However, the brain damage caused the story of his past experiences to dry from emotional attributes. When asked for emotional experiences, such as a collision event, sufferers of damage to the right hemisphere and the brain will focus more on telling less important attributes (for example, the color of the victim’s car, the weather on that day, etc.) and stripping the emotional element altogether.

2. Emotions are the Exclusive Product of Learning

Contrary to popular belief that emotions are the exclusive product of learning, some experts argue that several types of emotions are modality that are inherited from birth. For
example, we generally become anxious and tend to be afraid of large objects, loud sounds, and fast movements, even though we don’t know the exact identity of those objects. Feelings like this are often referred to as primary emotion and it is genetically passed down from generation to generation. In other words, we are born with a fear of large objects, loud sounds, and fast movements [8]. This speculation is strengthened by several studies on animals, one of which is a study taking mice that shows a genetic transfer of fear, without having to go through a learning process. The fear of separation in young rats will affect their adaptive behavior towards the environment. This behavior will be passed on to the child genetically. Generally, this fear is passed down for three generations, before finally weakening to the next generation of births.

As humans, we often experience feelings of fear when we find a giant foreign object approaching us. There are two stages of fear processing in this situation. The first stage is the fear that arises from the automatic reaction of our nerves which is the alert response. This reaction involves the sympathetic autonomic system that prepares us for the fight or flight response [9]. A common reaction is a racing heart and sometimes dilated pupils. This fast pounding heart facilitates the rapid pumping of blood to all organs of the body so that if possible, there will be a spontaneous response. We often find our running pace faster than usual when faced with danger. This is due to this activation of the sympathetic nervous system.

The second stage of emotional processing is characterized by a relatively slow attempt to identify the object's identity. At this stage, emotions mix with the cognitive component. With advanced brain scanning technology, using functional magnetic resonance imaging (FMRI), it found that at this stage brain activity both in the areas that regulate emotional and cognitive levels [10]. At this stage, as soon as the individual concerned is able to recognize the object, the necessary adaptive behavior appears. If the object threatens the safety of his soul, the sympathetic nerve will decide whether the individual in question will fight or run. On the other hand, if it is found that the object is harmless, then the parasympathetic nerve (which works in contrast to the sympathetic nerve) will relieve the alert reaction and maintain normal conditions again.

The interaction between emotion and cognition shows that humans need both in responding to the challenges of their environment. Emotion can be a suitable partner for human thinking capacity in dealing with complex situations, including the context of decision making. But unfortunately, the role of emotions in decision making is often neglected [11].

Decision making based on emotion is often seen as irrational behavior. Conventional management and economic approaches do place rationality as the main motor in decision making. The general view shows that humans tend to see the utility factor in determining the best choice [12]. To get the maximum benefit, individuals must consider all alternative decisions that exist. Inevitably, this process required tremendous effort. Furthermore, the research shows that limited human cognitive capacity causes performance in very complex tasks to be low.

3. Research Methods
This type of research is field research (field research). Namely using the object of research as a source of data or information acquisition. The research approach chosen is a qualitative data approach, namely data that is described in sentences, separated according to categories to obtain conclusions.

Qualitative research is research that intends to understand the phenomena experienced by research subjects such as behavior, perception, motivation, action, etc. holistically, and by means of descriptions in the form of words and language, in a context special nature and by making use of various natural methods [13].

In qualitative research, the questions that are asked as research questions include not only: what, who, where, when, how, but most importantly, must include the question why. The why question demands answers regarding the nature that exists in the relationship between symptoms or concepts, while the what, who, where and when questions demands answers regarding identity, and the how questions, demands answers regarding the processes. Qualitative methods have artistic, interpretative, and naturalistic characteristics. It is said to be artistic, because the research process with this method is more artistic (less patterned); called interpretative because the data from the research are more concerned with the researchers’ interpretation of the data found in the field; and is called naturalistic, because the research is carried out in natural conditions (natural setting) and without any engineering, manipulation and so on, also because the research is something that is natural and develops as it is, is not manipulated by researchers, and even the presence of researchers does not really affect the dynamics in the object under study [14].

Another opinion, that qualitative research is essentially an effort to observe people in their environment, interact with them, try to understand their interpretation of the world around them. Based on this description, it can be argued that this descriptive case study research seeks to observe and examine a situation in an organization according to what it is (natural), then the results of the research try to describe the object of research based on facts and data and events trying to connect events or research objects as well as analyzing it based on the concepts that have been developed before making it easier for researchers to solve problems. Descriptive research in the field of education and curriculum is quite important, describing the phenomena of educational activities, learning, curriculum implementation at various types, levels and educational units [15].

Qualitative research is aimed at understanding phenomena from the perspective of participants. Participants are people who are invited to interview, observed, asked to provide data, opinions, thoughts, perceptions [16]. Qualitative research is essentially observing people in their environment, interacting with them, trying to understand their language and their interpretation of the world around them. In qualitative research, researchers go to the field to conduct interviews, documentary studies and observations. According to Sukmadinata, qualitative research requires careful planning to determine the location, participation and initiate data collection. This plan is emergent or changes and evolves according to changes in findings in the field. The changing or emergent design is circular in nature because the determination of the sample is purposive, data collection and data analysis are carried out simultaneously and are interactive steps, not isolated. In qualitative research, researchers are expected to be able to mingle with respondents and understand what they want and don't want.
Through this qualitative method, data will be generated in the form of written or spoken words from the respondents or perpetrator informants who can be observed. This qualitative research method is popular and extends to various social science disciplines, including in education [18]. This method is essentially observing people and their environment, interacting with them, trying to understand their language and their interpretation of the world around them.

4. The Role of Emotions as Cognitive Shortcuts

However, in reality even rationally designed decision-making sometimes has an emotional element. A study shows that the part of the brain responsible for emotional processing also shows striking activity when the individual performs cognitive tasks. In this study, each participant was asked to make decisions rationally in a game simulation. At the start of each game, participants are given a hypothetical amount of money, for example 50 dollars. Then, participants are given the option to perform certain tasks (to maximize the money earned) or are quite satisfied with the money offered from the start (ie 50 dollars) [19].

There are two scenarios in the game. The first scenario is a "obtained" scenario, while the second scenario is a "lose". An example is in the “obtained” scenario, the subject is given a true option with two consequences: (i) getting a prize above 50 dollars (more than the amount offered at the beginning of the game) or (ii) if it fails, will only get 20 dollars. Meanwhile in the "lose" scenario, the subject is offered a bet option with two possible consequences: (i) a prize above 50 dollars or (ii) a possible default, that is, "losing 30 dollars". In both the first and second scenarios, if they fail, the participants will both come home with only 20 dollars. What distinguishes the two scenarios is the "obtained" (profit) and "lose" mindset.

From the research above, it was found that participants tended to choose the option satisfied with the money that was given from the start when given the bet option using the “obtained” scenario. Interestingly, when the betting options are changed using the “lose” scenario, the participant will be more likely to choose to bet rather than be satisfied with the amount offered in the first place. The illustration is as follows: in a betting scenario with a possible profit of and “getting 70 dollars and”; or a possible loss of and “getting 20 dollars and”, the subject will tend to choose the order with the originally offered amount of money, which is 50 dollars. However, when the betting scenario is changed with a possible profit of “getting 70 dollars and”; or a possible loss of and ”losing 30 dollars and”, the subject will tend to choose the bet option rather than accept the 50 dollar amount offered in the first place. Changing the choice of options in two different scenarios violates the principle of rationality in decision making [20]. If indeed humans are really rational creatures, then there should not be a change in the choice of options in the ‘obtained’; or and ‘lose and’; scenario, because after all the money earned is the same. From this research, it was found that different perspectives or how to view a context in decision making also influenced the choices made [21].
It is more interesting from the above research is the activity of the amygdala during which the participants make decisions [22]. The amygdala shows the highest activity when the individual chooses to be satisfied with the initially given amount of money (avoids the risk of betting) in the "obtained" scenario, and instead chooses the betting option in the "lose" scenario. This brain activity data provides strong evidence for the presence of emotional processing on tasks that were designed to enable participants to make rational decisions [23].

Emotion can act as a cognitive shortcut related to architecture in the human brain. Physiologically, there is a shorter pathway between the part of the brain that delivers sensory information and the part of the brain that processes emotions, namely through the superior culliculus and pulvinar pathways [24]. If the information conveyed by the sensory part of the brain does not contain emotional content, the processing may take longer because it takes a longer normal / default route. Visual information that is not emotionally charged, for example, will take a processing path through the visual cortex in the longer occipital lobe before entering the part of the brain that processes adaptive behavior.

Information processing begins with a visual stimulus that enters through the eyeball which is then delivered to the thalamus (Th), superior culliculus (SC). It is from this SC that visual information is processed in two distinct pathways before entering the frontal lobe — the area of the brain where executive function, including decision making, occurs. In general decision making, information from the SC will be conveyed to the visual cortex (VI) which has a long distance before going to the frontal lobe. In contrast to emotional decision making, information from the SC will be conveyed to the pulvinar (Pv) to the amygdala (AMG) without going through the visual cortex pathway. This pathway is relatively short in distance to the frontal lobe, allowing emotional information to be processed more quickly [25].

In addition, emotional labels often attach to certain experiences or memories - a phenomenon often referred to as emotional tagging which allows emotional memories to be recalled more quickly. This allows individuals to make quick decisions based on the emotional conditions that accompany the event. Other studies have also shown that the amygdala is involved in recalling human long-term memory which has emotional content [26].

5. The Relationship Between Emotions and Tourism Ethical Decision Making

However, the peculiarity of the emotion role, especially in decision making, has only recently been studied intensively. One study shows that subjective feelings are useful in making decisions on complex tasks [27]. When given a large number and variety of information, individuals who try to use an analysis strategy for each available information show the best accuracy. On the other hand, individuals who ignore detailed information and rely instead on subjective judgments show the best level of accuracy. From these results, the researchers concluded that limited cognitive capacity causes the analysis strategy to be unfavorable, and therefore the individual should switch to another strategy, namely trusting his subjective judgment. The limited human cognitive capacity has been shown in other studies, for example in working memory, which is a human short-term memory system that can generally only store 7-9 items at the same time.
On the other hand, emotions as physiological feedback in decision making [28]. In this study, subjects were asked to take a number of cards from the four decks of cards that were visible to the participants arranged randomly. This game simulation became known as the Iowa Gambling Task, a betting simulation game that was popularly used in studies related to decision making [29]. In this Iowa Gambling Task, each participant is generally instructed to collect as many points as possible from taking free cards from any pile of cards. Each card has the possibility to give profit (get points) or otherwise cause losses (reduce the points that have been collected). Making a decision from which pile of cards will be drawn will determine the success of the participants in this simulation game.

Unbeknownst to the participants, the deck of cards in the simulated Iowa Gambling Task has been arranged so that two out of four piles of cards give better results than the remaining two piles of cards. Thus, the performance in this game simulation depends on whether and how quickly the participants are aware of the characteristics of each deck of cards. If the participant realizes that a deck of cards gives maximum advantage, then the participant will draw more cards from the pile.

Furthermore, normal subjects were able to collect higher points than participants who experienced damage to the part of the brain that plays a role in emotional processing [30]. Further testing showed that a physiological signal, in the form of a skin conductance response, appeared when participants were about to take cards from an unfavorable pile. This physiological signal was finally named as the anticipatory electrodermal signal, which is a physiological-emotional reaction that prevents the individual from making mistakes [31].

So where is the relationship between emotions and tourism ethical decision making? The studies mentioned above at least provide insight that emotional information, both verbal and nonverbal (such as facial expressions) can provide feedback for individual behavior. For example, in adjusting to the rules that apply in society, individuals can use this emotional information to stay on the right track. In addition, individuals who have good emotional management strategies are generally more committed to moral decision making.

In making tourism ethical decisions based on emotions, individuals process emotions in a complex manner. This means that integration is needed between the part of the brain that is responsible for processing emotional information with other parts of the brain with a higher hierarchical level, such as the prefrontal cortex. Thus, it is necessary for the optimal functioning of the two parts of the brain so that emotional processing runs smoothly.

6. **Conclusion**

People who have damage to the amygdala and ventromedial prefrontal cortex (VmpFC) are equally unable to use emotional signals to show adaptive behavior. Individuals with damage to the amygdala are unable to produce emotional signals that can be used as feedback. Meanwhile, individuals who experience damage to the VmpFC section are able to show physiological reactions that are thought to arise as a result of emotional information processing (for example: skin conductance response), but nevertheless experience failure to process further emotional information. The VmpFC brain area is part of the frontal lobe of the brain and is believed to function in integrating existing information to produce complex behaviors.
Thus, from the explanation of scientific evidence from the study of cognitive science and neuroscience above, it can be concluded that emotions play a role in decision making, which reaches the social context, including the context of tourism ethical decision making. While several studies have shown that functional brain damage can lead to impaired emotional processing, several other things such as inappropriate emotional regulation can also cause individuals to be unable to fully exploit their emotional potential.

References


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