

The Role of Emotions in the Consumer: Theoretical Review and Analysis of Components

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Abstract—The early eighties saw the rise of a new research trend in several prestigious journals, mainly articles that related emotions with the decision-making processes of the consumer, and stopped treating them as external elements. That is why we ask questions such as: what are emotions? Are there different types of emotions? What components do they have? Which theories exist about them? In this study, we will review the main theories and components of emotion analysing the cognitive factor and the different emotional states that are generally recognizable with a focus in the classic debate as to whether they occur before the cognitive process or the affective process.

Keywords—Emotion, consumer behaviour, feelings, decision making.

I. INTRODUCTION

EXPLORING the role of emotions in consumers, there had been many contributions made earlier in this field, but [19] placed the first stepping stone in the construction of a psychological theory of emotion. He assumed the existence of specific emotions, which have a clearly instinctive base, and may be separate and distinct from certain feelings. Thus, the stimuli that come from colors and sounds produce feelings that are not emotional, that are distributed along a continuum or dimension of "pleasant-unpleasant". These aspects have considerably influenced later proposed theories and arguments. The thrill theory of [9] arises as a result of posterior criticism by [19]. The criticism basis focuses on the theory proposed by [19] that equated emotion with body changes. Reference [9] argues that emotions arise before behavior as its fundamental mission is to prepare the body for emergency situations, but body changes and the emotions occur almost at the same time, unlike [19], in which body changes precede the emotion.

According to [24], [26] can also be considered as one of the pioneering authors in the study of the Activation in Psychology. Reference [26] was who first tried to establish a correspondence between the continuum in psychological phenomena and the continuum in the registry of the electroencephalographic activity. Specifically, he thought that the psychological states characterized by maximum vigil, utmost excitement, utmost vigilance or alert, the most powerful emotions, corresponded to the EEG rhythms characterized by the highest frequency or cycles per second.

Reference [21] has an argument that focused on the difficulty that the theories of the activation had to explain the integration of various systems of the body in a unitary schema. Reference [21] proposed what is often referred as the System Dissociation Theory, which allows, in a more coherent way, to explain the various results that have been obtained when attempting to verify the Activation theory empirically from the perspective of the above unitary process. According to the proposed model, generally accepted today, it is established that the activation can be manifested through three response possibilities (electro cortical, physiological/autonomous and motor), not being necessary the existence of correlation between them. Therefore, activation is multidimensional.

Reference [34] defined the term emotion as an immediate organism response, which indicates the degree of favorability before a stimulus or situation. If the situation seems to favor survival, a positive emotion is experienced, and if not, a negative emotion is experienced. This way, living organisms use emotion as a mechanism for orientation, as a compass for each scenario, looking for those situations that are favorable to their continuance (the ones that produce positive emotions) and getting away from unfavorable situations (that produce negative emotions). This emotional evaluation is done through physical-chemical mechanisms that may be very different depending on the complexity of the organism. A simple unicellular organism has mechanisms to assess whether a situation or stimulus is favorable or unfavorable, while a mammal has emotional mechanisms much more complex in which the nervous system plays a key role. According to [34] the emotional mechanisms, just like perceptive, are limited and are subject to multiple incidents, both internal and external, that diminish their effectiveness. Accordingly, the emotion experienced may not correspond to the reality of the situation and cause serious damage to the organism.

Reference [22] explains how the process of emotional information can occur consciously, and below the thresholds of the consciousness. He specifically proposes the existence of five layers or areas that, from lower to the higher, would be the following: brain stem, diencephalon, limbic system, paralimbic system, and prefrontal cortex. All these neuroanatomical areas or layers intervene in the control of emotion. In the lower three layers, the stimulus processing would start of emotional responses without experimenting them consciously. Only when they involve the two areas above (paralimbic system and prefrontal cortex), then that's when it the subjective experience of emotion occurs. Similar is the contribution of other authors, such as [10]-[12] who tries to locate the neurobiological structure responsible for the

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emotional experience, basing their work on a conception of the nervous system organized hierarchically. But according to [29], the current situation assumes the relevance of these considerations, and continues to deepen in this knowledge. In fact, it is quite consolidated the idea that the subcortical structures are essential to understand all the dimensions of emotional behavior [23], [24]. Meaning that if emotions are basic adaptive processes that are present in the human being before it fully develops the structure and functionality of the central nervous system, and also are adaptive mechanisms that are present in many of the species below, because in their genetic background there is the appropriate allocation for them to appear and develop, as it seems sensible to propose that the biological infrastructure - or, again, neurobiological- is located in areas of the central nervous system that are relatively old, and that is the case of the subcortical structures. Also [30] came to defend that the basic organization of emotions seems to be located in the subcortical structures. On the other hand, [1] proposed that there are a number of concepts related to this topic: affection, emotion, mood and attitudes.

The first term, affection, is the most general of the three. According to [2], it would be "the expression that covers a set of more specific mental processes, including the emotions, moods and possibly, attitudes". It would be a general category of mental processes, rather than a specific psychological process.

With regards to the "mood", it would entail a duration greater than an emotion that usually lasts a short time, referring more to a relationship of the individual with the environment at the present time, being a very brief affective variable. The Mood can last up to several days and weeks. In addition, the emotion has a greater intensity in relation to the state of mind, existing a trigger or determined stimulus, producing a specific response to particular events. In contrast, in the state of mind, the triggers are located further away in time, more diffuse and less specific.

In relation to the differences between "excitement" and "feeling", according to [10]-[12], the feeling would occur when the brain is aware of the body change that is taking place to express a particular emotion, being therefore posterior to a temporary level.

With regards to the duration of the affective phenomena we could summarize it this way:

- Emotions: from seconds to days.
- Moods: from hours to months.
- Feelings: from days to entire life.
- Personality traits: from years throughout life.

According to [8], there are the following classes of emotions, on the basis of the degree in which they affect the behavior of the subject:

- Negative emotions:
 - Ire: anger, cholera, rancor, hatred, indignation, resentment, aversion, exasperation, tension, excitement, agitation, animosity, irritability, hostility, violence, jealousy, envy, etc.
 - Fear: horror, panic, terror, anxiety, scare, phobia, apprehension, unrest, uncertainty.

- Anxiety: anguish, despair, stress, worry, longing, grief, dismay, nervousness.
- Sadness: depression, frustration, disappointment, affliction, penalty, pain, spite, affliction, pessimism, melancholy, self-pity, loneliness, discouragement, reluctance, homesick, tilting, disgust, concern, despair.
- Shame: guilt, shyness, insecurity, shame, embarrassment, modesty, hesitation, redness, flushing, perplexity, grief, remorse, humiliation, spite.
- Aversion: hostility, contempt, acrimony, animosity, antipathy, resentment, rejection, suspicion, disgust, disdain, indifference, disgust.
- Positive emotions:
 - Joy: Enthusiasm, euphoria, excitement, happy, delight, fun, pleasure, shaking, gratification, satisfaction, caprice, ecstasy, relief and joy, fun.
 - Love: affection, love, tenderness, sympathy, empathy, acceptance, cordiality, confidence, kindness, affinity, respect, devotion, adoration, veneration, love, agape, gratitude.
 - Happiness: joy, tranquility, inner peace, joy, placidness, satisfaction, welfare.
 - Ambiguous Emotions:
 - Surprise,
 - Hope,
 - Compassion.
 - Aesthetic emotions: those produced by artistic manifestations (literature, painting, sculpture, music...).

Reference [8] also defends the existence of different types of emotions:

- Primary or basic: these are easy to distinguish in different species, both human and animal, as the causes that provoke them are constant and result in behavioral patterns. They are also the basis for the study of emotional neurobiology: fear, anger, disgust, surprise, sadness, happiness.
- Social: these are sympathy, embarrassment, shame, guilt, pride, jealousy, envy, gratitude and admiration, indignation and disdain. They also occur in animal species. These emotions are involved in the development of complex cultural mechanisms of social regulation. In addition, there are types of emotional reactions that are triggered without a clear and visible presence of the stimulus, such as behaviors of dominance or social dependency, and can exemplify the leadership and its followers.

II. COMPONENTS OF EMOTIONS

After the relevant documentary review, we can observe that there are three basic components of the emotions, related to the various theories of emotion.

First we have the neurobiological component, which highlights the activity of the autonomous nervous system and somatic system [3]-[7], [10], [14], [23]. In this component it is included the physiological reactions as:

- Movement alterations
- Respiratory changes.

- Glandular secretions.

The responsible for regulating the physiological aspects of emotions is the nervous system. The autonomic nervous system accelerates and decelerates the organs through the sympathetic and parasympathetic system

Within the physiological changes that occur during the emotion we can mention:

- Acceleration of the heartbeat and the pulse.
- Increase of blood pressure rate, skin redness.
- Rapid conversion of sugar into energy.
- Change in breathing rates and depth according to the intensity, duration and body emotional response during a specific situation.
- Increased sweating, as result of the muscular effort.
- Pupil dilation.

The second component would be the behavioral-expressive motor, in which facial expression, posture, gestures, body movement, positions of approximation-avoidance, verbal communication and tone of voice are of key importance [28]. This component refers to the existing connectivity between the emotional state of the people and the expressive and motor traits that are linked in a direct way.

The third component would be the subjective-experiential, [32]; that highlights the trend of the action of the state of mind that arouses emotion, due to the consideration of any circumstance that affects the interests of the individual. This component is particularly developed in humans, and involves a systemic structure of feelings, beliefs, desires and sensations. In addition, this theory has created quite the controversy, since many times, the important issue is to determine if it is a state of feeling, a special type of cognitive process, or a combination of both feeling and cognition. In any of the cases, as it can be seen in the above mentioned works, a large part of efforts is directed to elucidate the relationship between cognition and affection in general and between cognition and emotion in particular [29]. The trend in the literature of this topic is to adopt an integrative perspective of these components. Even so, it is necessary to differentiate them in order to be able to measure the emotions in an effective way, given that the expression of the various components is different.

III. THEORIES ABOUT EMOTIONS

Considering the components discussed previously, we would obtain the following classification of the theories of emotions:

The evolutionary theory of emotions starts with the works of [13], which relates the emotions of humans with those of animals, stressing that are related to our own evolution. Reference [13] highlights the innate nature of most of the emotions, based on facial expressions similar in animals, children and adults as well as in blind people at birth and in very different groups and human races.

Subsequently, [15], [16], [28] continuing with this line, point out that in a given emotional situation it arises a determined emotional expression, especially facial, innate and universal.

The psycho-physiological theory of emotions [19] considers that the emotional experience derives from the perception that the human being has of the physiological sensations in the body and its responses, preceding the emotional response of the peripheral nervous system. Consumer research in this sense can be [2], [16], [18], [27].

The neurobiological theory of the emotions, initiated by [9] criticizes the theory of James and concludes that the brain is the control center of the emotional behavior, specifically the thalamus. Its activation produces two simultaneous effects: the subjective experience of the emotion and the body changes associated with it. Other authors in this line are [3], [10]-[12], [14], [23], [24], [33].

The cognitive theory of emotions, based on what produces the emotional experience, is the cognitive activity that the subject performs to process the potentially emotional situation. This theory suggests that emotions have as background the subjective assessment of the individual of a situation or event. [2], [17], [20], [25], [32].

According to [31], the first theories put forward to explain the neuropsychological bases of the emotion perception [9], [19] emphasize the importance of feedback of body responses to an emotionally relevant stimulus and in the determination of the nature and extent of the emotional feeling, but did not distinguish between the identification of the emotional stimulus and the affective condition occurred.

The emotion perception must be understood in terms of the following processes that occur after stimulation, which in turn allows the generation of complex affective states, emotional experiences (Feelings), and behaviors:

1. Evaluation and identification of the emotional aspects of the stimulus. Once the stimulus has occurred, there is a process of identification of emotional reactions, with the subsequent positive or negative assessment of them.
2. Production of a certain affective status in response to stimuli, including autonomic responses, neuroendocrine and somatomotor (facial, gestural, vocals, of behavior), as well as the emotional feeling conscious, which you can guide the process 1 toward the identification of specific categories of emotional stimuli
3. Regulation of the affective and emotional behavior of the current State, which can involve an inhibition or modulation of processes 1 and 2 so that the affective state and behavior produced are contextually appropriate (Fig. 1).

According to [29], the current situation keeps revealing the existence of two distinct approaches: the one centered on feelings and cognitivist. It may be easy to opt for one of the two orientations. Apparently, it would be prudent to adopt an Aristotelian conception: if someone does not carry out an assessment of all the variables involved in a given situation, it's hard to conclude that it corresponds to a particular emotion. Meaning that you get to experience an emotion and/or feeling after having carried out the relevant evaluative and assessment processes. However, within the prudence that must guide a theoretical approach in the emotional field, it would be difficult to deny that the evaluative and assessment

processes that we carry out at a given time, including the subjective and self-aware experiences of an emotion, are considerably modulated, sometimes in a very important way, by the affective state that we are in at the moment.

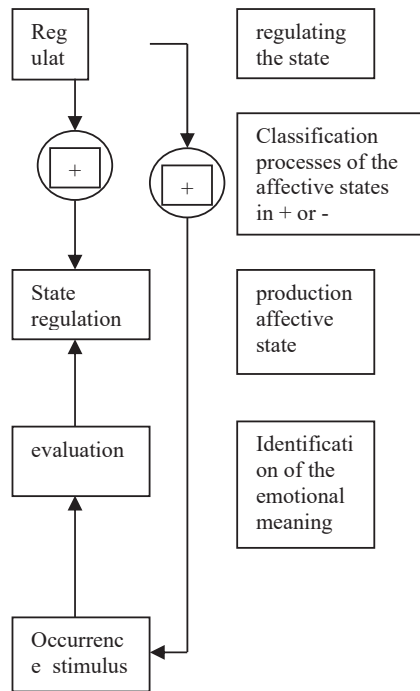


Fig. 1 Main processes in the perception of emotions

Perhaps as [29] indicates, it would be more relevant to defend a continuous interaction between affective and cognitive processes, which would represent the filter by which all the stimuli that we receive passes. Each of them has a sensory dimension and of information, and a qualitative and affective. Some of these stimuli are so important, in its sensory dimension and of information, as well as in the qualitative and affective dimension, that they can modify the current affective state of the person. If, on the contrary, the relevance of those stimuli is not high, it will be the current affective state of the person which will impose its affective relevance

In general, modern cognitive theories of emotion have overestimated the role of cognitive processes. It is clear that all the processes involved in the sequence of knowing a stimulus refers to the functioning of the nervous structures above mentioned. But, with a few exceptions, little attention has been paid to the influence that the affective state has on the cognitive functioning itself. This influence makes it, in normal conditions, the cognitive processing of the stimuli to be more likely or related to situations of the affective state of the subject at that time, and less likely the cognitive processing of those stimuli and different situations that are not related to the current affective state. One might also consider the possibility that the cognitive processing of all the stimuli

that reach the subject occur simultaneously, regardless of their qualitative dimension. However, this possibility would be a much more fluid processing of the stimuli and situations related to the affective state of the subject at that time. Those other stimuli and situations that are not related to the current affective state would also be processed, though in this case, would be influenced with the affective quality of the current affective state of the subject.

It is necessary to consider the cognitive factors so an emotion happens, but we cannot leave aside the important modulator role of the affective state of the subject. While the emotional process (affective) requires a prior cognitive processing, the cognitive processing itself is influenced, modulated and even determined by the current affective state (affective process) of the subject. The classic and at the same time current controversy as to whether it occurs before the affective processes or the cognitive processes lose its true dimension if we assume that there is a constant interplay between affection and cognition. The affective process includes a cognitive dimension, and the cognitive process includes an affective dimension. Each of the two processes (affective and cognitive) are part of another process.

IV. CONCLUSIONS

The description process of the conceptual framework of emotions is diverse, as there are different factors that influence it.

In spite of the fact that the emotions have been historically defined as discomfort and defects that distort the correct human behavior in the process of evaluation of alternatives, there is more than objective evidence that this is not the case, given that decisions that are taken on the basis of emotions are much more durable and commensurate with human nature that those who are within rational variables.

Within the description of emotions, a particular mention should be made of their very nature, highlighting the neurobiological component, the motor and the subjective-experiential aspect.

There are also different theories about emotions, starting with the Evolutionary, focused on the process of their change in time, the psycho-physiological, with great emphasis on the perception of the human being, the neurobiological, with a point of view focused on the biological nature of its components, and the cognitive, based on the interpretation of the different stimuli received, and how these after a rationing process derive in a determined emotion.

In any case, emotions require a multi-dimensional measurement, because they are complex elements with different interpretations.

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