Review Article

Emotion, Disorders of Emotion and its Assessment: An understanding

Abstract

Emotion is the most important part of life of us as a human being. Emotion has a substantial influence on the cognitive processes in humans mainly in the area of perception, attention, learning, memory, reasoning, and problem solving. Emotion has a particularly strong influence on attention, especially modulating the selectivity of attention as well as motivating action and behavior. The purpose of the study was to explore about the emotion, its type, theories, morbidity, sociocultural aspects, and assessment. The article describes about emotions theoretical perspective on positive emotions and situates this new perspective within the emerging field of positive psychology.

Keywords: Emotion, Disorder, mood, Affect, Assessment.

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Introduction

Emotion is the most important part of life of us as a human being. The experience of emotion and its persistent existence add a colorful flavor to our life. Emotion with its other inseparable entities cognition and behavior makes our life a complete whole. The word emotion derives from the Latin word 'Emover', literally, 'to excite'. Kaplan (2005) defines emotion as a 'complex feeling state with psychic, somatic and behavioral component', and which is related to the notions of affect and mood. Oyebode (2008) describes emotion as a term which is often used to refer to 'a spontaneous and transitory experience similar to, but not identical to feeling, as it need not incorporate the physical accompaniment of experience.' Taylor & Vaidya (2009) define an emotion as 'a mental state or feeling such as fear, hate, love, anger, grief, or joy, arising as a subjective experience rather than as a conscious mental effort'.

Emotion from developmental perspective

Emotion in infancy and childhood: Children show most of the emotions that adult display. By the age of 3 months they show joy; excitement, happiness, sadness. Anger is found between 4-6 months. Fearfulness appears by 7-8 months. Most infants show anxious reactions to stranger by the age of 8 months. Between 18-24 months, babies develop embarrassment, empathy and envy. At 2-3 years children show pride, shame, guilt, regret. By this time the child can also name the emotions they perceive in

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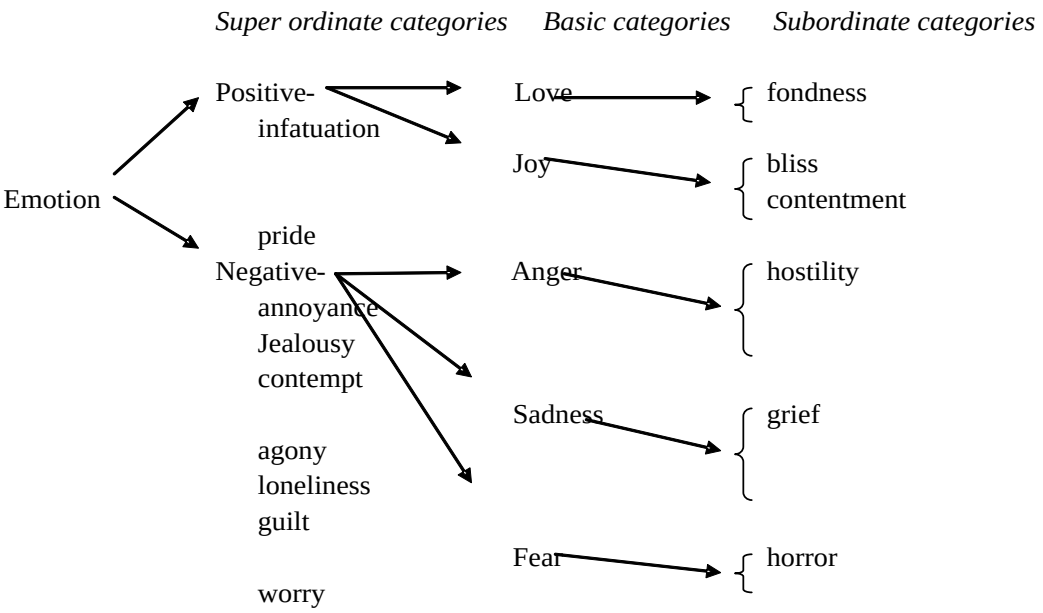
Types of emotion



An emotion hierarchy. Source: Fischer et al. (1990), p.90.

others. By the age of 10, children with depression express self criticism, death wish and somatic complaints. *Emotion in Puberty*: Emotion in puberty is characterized by moodiness, sulkiness, temper outburst and the tendency to cry at the slightest provocation. Depression, irritability and negative moods are especially common during the premenstrual and early menstrual periods of girls. (Hurlock, 2001)*Emotion in Adolescence:* adolescents express their anger by sulking, refusing to speak, or loudly criticizing those who anger them. (Hurlock, 2001) *Emotion in geriatric population:* Depression, Anxiety, Disturbances of sleep and appetite, anxiety, apathy and somatic complaints are common in old age. Depression induced cognitive impairment, also known as depressive dementia or pseudo dementia is another problem in old person (Hurlock, 2001)

Emotional disturbances during developmental period

The oral period: The emotional problems which arise during the oral period are difficulties in feeding, in mothering, in too much or too little stimulation, separation of the child from his mother, particularly after five months of age. The child feels pain, discomfort and reacts as refusal to eat and by turning away from the human beings. The anal period: The process of toilet training imposes severe emotional strains on the child if his toilet training, have not been achieved optimally either because of organic or gastrointestinal illnesses or because of parents. He suddenly may develop an acute or a more or less chronic anxiety state. Too sudden or too early toilet training may cause him to regress. When he fears to express theses feelings, he may begin to stutter. The genital period: The feeling is one all children have when they are separated from the persons they love. It is very painful and upsets the child greatly. When the mother /father goes out to work the child becomes very frightened and upsets. Anxiety feelings are increased if there is a long absence of one parent or the other or if the parents have been too restrictive or too indulgent. Phobias and temper tantrums are universal during the genital period. A child may develop classical conversion hysteria or classical obsessional neurosis. A child may develop tics or severe stuttering. The adolescence period:

Besides the classical neuroses and the obsessional neuroses, the emotional illness which occur during the pubertal period -13 to 16 years of age –fall into two main groups; those characterized by impulsive behavior that gets the individual into trouble with his parents, the school, and the social organization.

Normal and abnormal emotional reactions

From a psychiatric viewpoint, emotions are considered "healthy' unless they represent very extreme and or inappropriate reactions. For example, reacting with extreme depression to the death of a loved one is considered a perfectly normal response in our culture. Experiencing severe depression on the thirtieth anniversary of the death of one's pet goldfish, however, would qualify one for a psychiatric disorder. The 'appropriateness' of any given behavior often varies from culture to culture. Crying at a wedding is considered normal in some cultures and abnormal in others. Moreover, within any given culture, the appropriateness of the same behavior may vary from situation to situation. A screaming in private may be considered abnormal, whereas screaming in public may be considered normal.

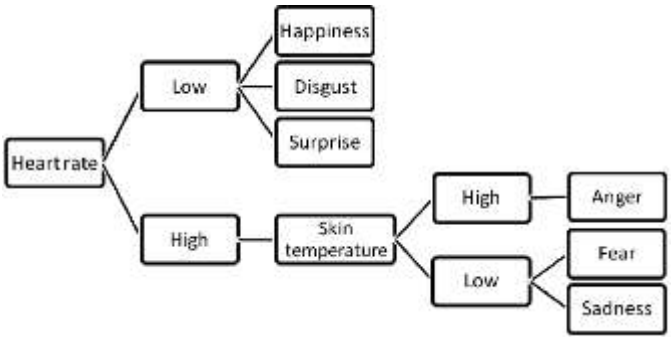
Physiology of Emotions

The bodily changes that occur in emotion are produced by the activity of autonomic system. The autonomic nervous system has two parts, (a) sympathetic nervous system and (b) para sympathetic nervous system. The sympathetic nervous system is active during aroused state like fear, rage etc. The parasympathetic nervous systems are active during the calm and relaxed states. There is a blend of both sympathetic and parasympathetic activity during sex and anger. *Physiological changes during emotion: (A)External change*-Changes in facial expression, changes in bodily postures, changes in vocal expressions.

(B)Internal bodily changes- Changes in blood pressure, chemical changes in blood, changes in the rate of respiration, changes in the heart beat & pulse rate, changes in gastrointestinal activity, changes in glandular secretions, changes in galvanic skin reaction, changes in pupillary responses, changes in brain waves.

Facial expression as a mirror of emotions

According to Ekman et al., (1983) facial expressions of emotions is mentioned below.



Gender and Socio-Cultural Aspect of Emotions

Gender and Emotion:

Women are believed to be more emotionally skilled and expressive than men, especially regarding sending and receiving nonverbal cues, smiling, gazing, and expressing sadness and fear, whereas males are stereotyped to be more logical and to express more anger than females. A wide variety of self report measures have indicated that women rate themselves as more expressive than men. Females also generally report more empathy and sympathy than do males. Many negative emotions including distress, sadness, disgust, fear, shame-are also reported more by females than by males. But men express more anger through vocal, facial, and behavioural modalities than women (Lewis, 2004). *Culture and Emotion:*Cross-cultural differences exist in the experience and expression of emotion. Evidence suggests that emotional experience is perceived and expressed more intensely in individualistic rather than in collectivistic cultures. People from individualistic cultures feel more comfortable expressing negative emotions than

people from collectivistic culture. (Lewis, 2004) *Socio-Economic Status and Emotion:* Lower income was related to higher intensity of emotional experience. Studies show that high income was related to subjective wellbeing or pleasant emotional experience. In less developed countries social life is more uncontrollable and social stress is stronger, which is linked to the more intense emotional reaction and at the same time more unpleasant emotional experience (Lewis, 2004)

Neurobiological Basis of Emotions

The three neural systems of most interest in psychiatry are the thalamo-cortical system, the basal ganglia, and the limbic system. Cortical regions are linked to the hippocampus, mammillary body, and anterior thalamus in a circuit that mediated emotional behaviour. James Papez (1937). The ventral stream and dorsal stream are also helpful in the regulation of emotion. The hypothalamus, a small structure within the diencephalon, is a crucial component of the neural circuitry regulating not only emotions, but also autonomic, endocrine, and some somatic functions.

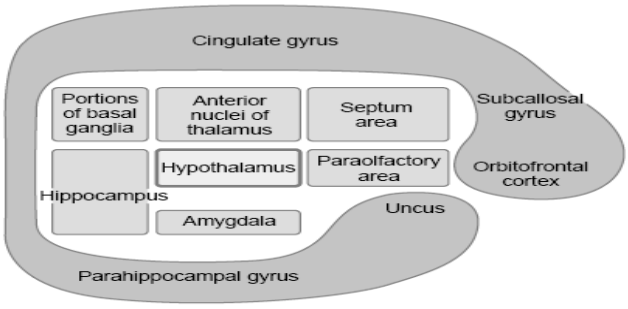


Figure 58–5

Limbic system, showing the key position of the hypothalamus.

Emotion, Feeling, Mood & Affect

Fish (1984), explains emotion as 'a moved or stirred up state of the organism caused by physiological changes occurring as a response to some event' feeling has been used to describe a positive or negative reaction to an experience. Mood is a sustained and pervasive emotional response which colours whole psychic life. Affect is short-live waves of emotion to an idea or an event and is used to cover mood, feeling, attitude, preferences and evaluations. It is the observable behaviour in expression of emotion. Affect can be expressed in three ways (Tasman, 2003): (i)Autonomic responses that may reflect in sweating, trembling, blushing and becoming flushed(ii) Speech changes that reflect affect by changes in tone of voice, vocalization and word selection(iii) Body movement in assuming postures, alternation of facial expressions, reactive responses and grooming movements like stroking of hair or chin

Classification of Emotional Disorders: Emotional disorders may be classified under the following broad heads-Abnormal emotional predispositions, Abnormal emotional reactions, Abnormal expressions of emotion, Morbid disorders of emotion and Morbid disorders of the expression of emotion.

Abnormal emotional predispositions: It is believed that abnormal personalities and temperament are determined by genetics, as may be true in the case of hyperthymic, dysthymic, cyclothymic and irritable temperaments often seen in manic-depressive disorders. Hyperthymic personality- Subject is over cheerful and is not touched by minor irritations of life. Some people have an increased emotional responsiveness, so that their mood swings from euphoria to depression with slight changes in their emotional environment. Emotionally cold personality-Marked by a general indifference, lack of emotion, and an absence of appreciation for the finer feelings. Cyclothymic personality- Characterized by gradual and modest mood swings lasting for weeks to months. When the mood is elevated, the person is extroverted, outgoing, cheerful, optimistic, impulsive, restless, talkative, and uninhibited. Dysthymic personality: Such a personality prefers to focus on the darker side of life and hence feelings of *being miserable* are common. Irritable personality: The irritable personality is hypercritical, brooding, complaining, dysphoric, restless, sarcastic, irritable,

and choleric. They are easily vexed when things do not go as they expect.

Abnormal Emotional reactions: Anxiety: Anxiety is always accompanied by autonomic symptoms such as palpitation, sweating, difficulty in breathing, dizziness, disturbance of sleep, lack of concentration, difficulty in remembering and irritability etc. Fear: When fear becomes intense, chaotic motor behavior may occur, which is usually called 'panic'. When it is restricted to one object, situation or idea, the term phobia is used. Phobias are associated with physical symptoms of anxiety and with avoidance. Depression

Endogenous depression: This kind of depression has a larger genetic component, and is characterised by a high proportion of biological symptoms. Reactive depression: it occurs due to severity of life stressors usually transient phase that is precipitated by a stressful life event. Morbid depression: characterized by helplessness, hopelessness, worthlessness and cognitive tried.

Abnormal Expressions of Emotion: Dissociation of affect- Unconscious defense against anxiety. There are mainly two kinds of dissociation of affect that is: Denial of anxiety and La Belle indifference

Perplexity: Perplexity is a tentative or bewildered, slightly puzzled state that occurs in anxiety and schizophrenia,

Morbid Disorders of Emotion: Anhedonia: inability to experience pleasure. Apathy: There are three characteristics of emotional expressions of apathy (Tasman, 2003)-*(1)*Avolition*:* reduced activity associated with an absence of emotion, interest, and concern. (ii)Alogia: brief, lconic, and empty replies. Fluency and productivity of speech are reduced.(iii)Affective flattening*:* The face appears immobile, unresponsive with poor eye contact and impoverished body language. Organic neurasthenia: Mild anxiety mixed with depression and irritability, occurring in mild, acute and chronic coarse brain diseases. Feeling of a loss of feeling: It is subjectively experienced as a loss of feeling. Vital hypochondriacal depression: The patient feels a tight band around his head and there may be a sense of oppression in the chest associated with anxiety. for this, modern concept is somatisation Extreme apathy: Extreme apathy may be a feature of severe depression, schizophrenia or damage to the frontal lobes. Euphoria: Excessive unreasonable cheerfulness .Ecstasy: Ecstasy is an exalted state of feeling and is different from the morbid cheerful mood or elation. It is a state of extreme well-being associated with a feeling of rapture, bliss and grace. Witzelsucht: Witzelsucht is a happy-go-lucky carelessness and silly facetious humor. Pathological anger: Persons with paranoid, anti-social personality disorder and delusions of persecution are typically angered in response to their view of a hostile world. Patients who have abused chemical inhalants are prone to sudden, potentially lethal, violent anger. Morbid surprise: It is an exaggerated startle response characterized by a myriad of echo phenomena including echolalia, echopraxia and echomimia. There is also coprolalia, automatic obedience and hyper suggestibility. It is seen in *latah*. (a culture-bound syndrome) .Hyperekplexia: Literally meaning "exaggerated surprise", it is a neurologic disorder classically characterised by pronounced startle responses to tactile or acoustic stimuli and hypertonia. Prosopoaffective agnosia: Refers to the selective deficiency in appreciating the emotional expressions displayed on the face of others. This is different from prosopagnosia in which recognition of familiar faces and vocal expressions of emotion is impaired. It is associated with fronto-temporal dementia. Receptive emotional dysprosody: Refers to the selective deficit in recognizing the emotional tone of speech. This is often associated with expressive emotional dysprosody, the impairment of production of emotional tone in speech. Both are found in Parkinson's disease.

Morbid Disorders of Emotional Expression: This differs from abnormal expressions of emotion in that

the person is unaware of the morbidity in emotional expression even though it is apparent to observed. *Morbid disorders of Emotional Expression are* disturbance in intensity, disturbances in the mobility of emotion,disturbances in the variability, disturbances in appropriateness, recognition of emotion, disorder of emotion in different diagnosis.

DISORDER OF EMOTION IN SCHIZOPHRENIA: The common mood disorders in schizophrenia are elevated mood, depression, anxiety, perplexity. Disorders of emotional expressions are prominent than disorders of mood in chronic schizophrenia. Anxiety is usually associated with persecutory delusions and hallucinations. The perplexity which often occurs at the onset of illness in young people is probably partly due to anxiety. The characteristic schizophrenic disorders of affective expressions are flattening, incongruity and stiffening of affect. Nearly all patients in the chronic stage of schizophrenia show blunting of affect Fish, (1984). Individuals with schizophrenia show impairment in processing and facial expression of emotion in both behaviour and neuro-cognitive tasks, which are particularly marked for threat related expressions such as fear. (Mandal et al, 1998). *DISORDER OF EMOTION IN BIPOLAR DISORDER:* Delirious (Bells) mania: characterised by extreme excitement, hallucinations and delusions (often fantastic and grandiose). Cyclothymia: characterized by gradual and modest mood swings for weeks or months characterized by episode of hypomania and mild depression. Dysthymia: feelings of inadequacy, guilt, irritability and anger, withdrawal from society, loss of interest and inactivity and lack of productivity. Melancholia: Is a severe depressive state in which some patients experience dulling of emotions. Alexithymia: It is characterized by difficulties in describing or being aware of one's emotions or moods and difficulty in elaborate fantasies. *DISOREDER OF EMOTION IN ANXIETY DISORDERS:* Emotions becomes dysfunctional in GAD through rapid temporal process of dysregulation of emotion involving Heightened intensity of emotions, Poor understanding of emotions, Negative reactivity of one's emotional states and Maladaptive emotional management responses. Persons with GAD may also have difficulty in identifying primary emotions such as anger, sadness, fear, joy and disgust (Mathews, 1998). *DISORDER OF EMOTION IN SUBSTANCE ABUSE:*The main emotional disturbances are inability to identify and express feelings. They are vulnerable to experience negative affect. Hostility and features of alexithymia are also present in patients of substance abuse. (Jaffe et al., 2005). *Disorder of Emotion in Borderline Personality Disorder and other Personality Disorders:*Emotional dysfunction is the core characteristic of BPD. There is deficits in emotional intelligence leading to affective instability, chronic feeling of emptiness and intense anger. (Gardner, 2009).In paranoid personality disorder mistrust is predominant and occurs whenever an emotional reaction is warranted. Similar in narcissistic personality leaves with feeling of superiority and uniqueness. Individuals with schizoid personality disorder feel emotions but are unable to produce and express emotions. On the other hand in dissocial personality disorder cannot produce empathy and feel emotions. The histrionic personality disorder is emotionally over-expressive (Linden, 2006). *DISORDER OF EMOTION IN CHILDREN:* Children with autism demonstrate poor emotional expression and fail to exhibit “affective sharing”. Emotion expression deficits have also been identified in children with Down syndrome. Children with ODD, CD & ADHD express more hostility and more surprise (Berk, 2006).

CLINICAL ASSESSMENT OF EMOTIONS

ASSESSMENT OF MOOD:A particular mood is not necessarily abnormal or pathological but must be evaluated in context of the patient's entire history and psychiatric mental status examination. Assessing mood in an individual is a difficult task, but there are some dimensions on which mood can be assessed

with reasonable accuracy. (Tasman, 2003). The dimensions are - (a) Quality- Refers to the 'label' of a mood. It may be characterized as depressed, dysphoric, elevated, irritable and the like. Quality of mood can be assessed by asking the patient directly, “How do you feel?” or “What is your mood like these days?”(b) Stability- Is the consistency of the reported mood. To elicit stability one may ask, 'To what extent does your mood remain constant over time?', or “Do you always feel like this?”(c) Reactivity- The ability to react emotionally to innate changes in environment. It is assessed by asking “Does your mood ever change?” or “When does your mood change?” (d) Intensity- The degree to which an emotion is experienced, clinically assessed by asking “What is it like to feel this way?” or “On a scale of 0-10 how would you rate your mood?” (e) Duration- Duration is regarded as the basis for the experience of passage of time. It can be evaluated by asking “How long have you felt this way?”(f) Congruence- Whether the emotion shown is congruent with the thought content. This is based on the interviewer's impression.

ASSESSMENT OF AFFECT: An appropriate affect is exemplified by people who are able to express the full range of emotions in a manner consistent with their thoughts and speech. Assessment of affect is not easy on the basis of a verbatim account of an individual, because sometimes what the person speaks or shows, might be incompatible with what she actually feels. So we need to assess affect on a cross-section of certain dimensions (Tasman, 2003), which dimensions are - Quality: The label or valence of the affect. Assessed on two criteria- Subjective evaluation: 'How do you feel?'Objective evaluation: Based on the observation of interviewer. The quality of affect may take any of the forms mentioned below -

Dysphoric, Anxious, Irritable, Sad, Hypomanic, Elevated, Euphoric, Elated, Exalted, Ecstatic, Expansive, Euthymic .Range: The range of the affect is characterized by the variety of emotional expressions. The criteria for assessing range are -*Full range*: Patients who appropriately express many different emotions depending on the context have a full or broad range of affect. *Restricted range*: Person shows only a fixed emotion, or limited range. Intensity: Intensity of affect (the strength of emotional expression) normally varies according to the situation. Those with a limited emotional expression may have - *Shallow affect:* when there is a lack of depth in emotion. *Blunted affect:* Greatly diminished emotional response or expressionless face and a uniform voice, irrespective of the topic of conversation, patient is indifferent to distressing topics. *Flat affect*: When no affect is displayed it is reported to be flat or absent in emotional response. Or it may be understood as an absence of appropriate outwardly emotional responses. Mobility: The mobility of affect is related to ease and speed with which one transitions from one type to another type of emotion. Changes in type and intensity of emotional expression normally occur gradually. Deviations from the normal include -*Constricted affect*: Reduced mobility is also referred as constricted affect. *Fixed affect*: When affect is extremely constricted to one emotion it is called fixed or immobile. *Labile affect*: Pathologically increased mobility of affect is referred to as labile, marked by a rapid shift from one type to another emotion without persistence of any one affect. Reactivity- The reactivity is the extent to which affect changes in response to environmental stimuli. When the patient does not respond to examiner's provocation in the form of joking, for instance, the affect is said to be non-reactive.Communicability- The ability of the expression of affect to communicate to another one's emotional response to events, interaction, behavior and situations. Appropriateness- It refers to the congruence or 'fit' between the expressed quality of emotion and the content of speech, thought, expected degree of intensity and the overall situation.

ASSESSMENT TOOLS OF EMOTIONS: *Mental Status Examination (MSE):* measures patient's current state of mind. *Present State Examination (PSE):*

interview schedule to assess current mental status. *Schedules for Clinical Assessment in Neuropsychiatry (SCAN):* used by trained clinicians to evaluate and diagnose various psychiatric disorders.

Rating Scales to Assess Disturbance in Emotion:Young Mania Rating Scale (YMRS), Young et. al., (1978),The Mood Disorder questionnaire (MDQ), Hirschfeld (2000),The Manic State Rating Scale (MSRS), Beigal et al., (1971),The Beck depression Inventory (BDI), Beck (1961),The Hamilton Rating Scale for Depression (Ham-D), Hamilton (1960),The Carroll rating Scale for Depression, Carroll, (1981)

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CONCLUSION

An understanding of emotion, emotional disorder and its assessment is vital to proper diagnosis and treatment. Careful examination is essential to avoid mismanagement of the disorders. The understanding of emotion is pivotal for Emotional Health and psychosocial wellbeing. Emotional understanding helps in positive personality growth and benefits all other human also. The article describes a new theoretical perspective on positive emotions and situates this new perspective within the emerging field of positive psychology.

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