# TYPES OF BASIC EMOTIONS AND THEIR EFFECT ON HUMAN BEHAVIOR

### KOVALKOVA T.

Candidate of Pedagogical Sciences, Associate Professor of the Department of Psychology "KROK" University Kyiv, Ukraine

Emotions are an integral part of human life. Emotions came from the Latin word "emovere" which means "to move out". Emotions are often intertwined with personality, temperament, mood, disposition and motivation. In psychology, emotion is often defined as a complex state of feelings that results in psychological and physical changes that influence thought and behavior. It's a strong feeling deriving from one's circumstances, mood or relationships with others. Emotions are considered as the building blocks of personality. They influence behavior. Emotions have both physiological and cognitive elements. Cognition is an important aspect of emotions [1; 3; 16; 18; 19; 21; 22; 29].

Emotions together with cognition and motivation help us to define other people and their relationship to the environment [35]. Emotions can be defined as psychological process, including expressive behaviors, emotion-specific motivational tendencies and physiological process and cognitions. Moreover, the affective component in emotions is considered the core element of emotions [40].

Emotions have been studied in psychology, biology, psychiatry, neuroscience, anthropology and sociology as well as in advertising, business management and communications. Aristotle wrote that emotions are feelings that change men as to affect their judgments, and that are also attended by pain or pleasure. Such are fear, anger, pity with their opposites. Emotions influence everything, the perceptions we have, the actions we do. We use many different words to describe the emotions that we feel. There are many different types of emotions that have an impact on our lives. TV shows can make us laugh or cry. We avoid people that scare us. People eat until they feel satisfied. Recently psychologists have tried to identify the different types of emotions that we experience. There are a few theories that explain the emotions which people feel. Emotions can be divided into "basic" or "primary" and "secondary" emotions. Accordingly, there is an enormous range of emotions [30].

The concept of "basic" or "primary" emotions dates back to the Book of Rites, a first-century Chinese encyclopedia that identifies seven emotions: anger, disliking, fear, joy, liking, love and sadness. Nowadays psychologists have not figured out how many different kinds of emotions people feel. William James proposed four basic emotions: love, grief, fear, and rage, based on bodily involvement. One theory is that we feel six different kinds of emotions: anger, disgust, fear, happiness, sadness, and surprise.

In the 20th century, psychologist Paul Ekman identified six basic emotions. He suggested that they were experienced in all human cultures. In 1972, he identified such emotions as happiness, sadness, fear, disgust, anger and surprise. The six basic emotions described by Ekman are different types of emotions that people are capable of experiencing. Ekman's theory suggests that these core emotions are universal throughout cultures all over the world. Ekman later added a number of other emotions to his list. He suggested that not all of these emotions could be encoded through facial expressions. In 1999, he expanded the list of basic emotions to include such emotions as amusement, contempt, contentment, excitement, embarrassment, guilt, pride in achievement, relief, satisfaction, shame [6; 7; 8; 9; 10; 11; 12; 13; 14].

Wallace V. Friesen and Phoebe C. Ellsworth worked with him and agreed on the same structure of emotions. In the 1980s, Robert Plutchik proposed eight "basic" emotions, which he grouped into four pairs of polar opposites. Plutchik identified such emotions as anger-fear, happiness-sadness, surprise-anticipation, trust-disgust. These emotions can then be combined to create others (such as happiness + anticipation = excitement) [15; 20].

Another theory is that we feel two opposite emotions, like excitement or calmness and pleasure or displeasure, that are mixed together to form all of our emotional feelings. Psychologist Robert Plutchik said that emotions can be combined to form different feelings. According to this theory, more complex, mixed emotions are blendings of more basic emotions. For example, basic emotions such as joy and trust can be combined to create love [42].

The hypothesis is that more complex emotions are blends of basic ones. For example, contempt could amount to anger and disgust. However, basic emotions can function as building blocks. Again, many complex emotions cannot be deconstructed into more basic ones. Frustration could amount to anger combined with the belief that "nothing can be done". Instead, many complex emotions resist such analysis. Thus, "primary" emotions can result from quite complex cognitions.

However, not all theorists agree what are the "basic" emotions. While Ekman's theory is one of the best known, other scientists have proposed their own ideas. They have suggested that emotions make up the core of the human experience. For example, some researchers have thought that emotions exist in a hierarchy. "Basic" emotions, for example, anger, joy, surprise and sadness can be broken down into "secondary" emotions. These "secondary" emotions might be broken down into "tertiary" emotions. The "secondary" emotion of affection includes "tertiary" emotions such as caring, compassion, liking and tenderness.

Emotions influence how we engage with others in our lives, they affect the decisions we make. It is important to remember that many emotions that people experience are complex. However, emotions have a great impact on our behavior [31; 32; 36; 37; 38; 39; 41; 43; 44].

Richard and Bernice Lazarus list fifteen emotions: aesthetic experience, anger, anxiety, compassion, depression, envy, fright, gratitude, guilt, happiness, hope, jealousy, love, pride, relief, sadness, and shame [35]. A more recent study was conducted in 2017. Researchers Alan S. Cowen and Dacher Keltner PhD from the University of California, Berkeley published the study in Proceedings of National Academy of Sciences. They identified twenty-seven different types of emotions. They were admiration, adoration, aesthetic appreciation, amusement, anger, anxiety, awe, awkwardness, boredom, calmness, confusion, contempt, craving,

disappointment, disgust, empathic pain, entrancement, envy, excitement, fear, guilt, horror, interest, joy, nostalgia, pride, relief, romance, sadness, satisfaction, sexual desire, surprise, sympathy and triumph. It's amazing that such emotions as anger and happiness are not on the list. Using all of the findings, these emotions can originate from other emotions, e.g., fear or envy. This study was based on 2185 short videos intended to elicit a certain emotion. The videos show a wide variety of situations and events, including a cat giving a dog a massage, a man with a spider in his mouth and an awkward handshake. The great variety of emotions suggests that the type of emotion may be related to mental state and process of a person. The viewers were asked to report their emotional experiences and responses. There were more than 800 volunteers, who took part on the Amazon Mechanical Turk. Let's explore the impact these emotions have on human behavior. Researchers Alan S. Cowen and Dacher Keltner were able to reveal that there are twenty-seven truly distinct types of emotions. The study found that emotions can overlap. According to the research, multiple emotions could be elicited from one specific event rather than one single feeling. Researchers created an interactive map to demonstrate how each type of emotion add to the reaction and how these emotions are related to one another.

In other words, researchers suggest that at least twenty-seven distinct emotions are highly interconnected. The senior researcher Dacher Keltner, who is a faculty director of the Greater Good Science Center, explained that twenty-seven emotions were necessary to report the feelings of people in response to each video. After analyzing the responses of more than 800 people, researchers suggest that emotions are not states that occur in isolation. Thus, there are gradients of emotions and these different feelings are deeply interrelated.

Alan Cowen suggests that researchers can develop improved treatments for psychiatric conditions. The study's lead author and doctoral student in neuroscience at UC Berkeley hopes that better clarifying the nature of our emotions can play an important role in helping psychologists, scientists and physicians learn more about how emotions underlie behavior, mood and brain activity [5].

Let's explore different kinds of emotions and their impact on human behavior [23; 24; 25; 26; 28; 33].

## Happiness

Happiness is a pleasant emotion that is characterized by feelings of joy, contentment, gratification, satisfaction and well-being. Since the 1960s has increased the research on happiness by means of positive psychology. It is a term that is taken for granted in this modern age. Psychology describes happiness as subjective well-being, or <u>people's evaluations of their lives and encompasses both cognitive judgments of satisfaction and affective appraisals of moods and emotions" [34].</u>

Let's describe key components of subjective well-being. The four components that have featured in philosophical material on happiness since ancient times are:

- low levels of negative affect;
- life satisfaction;

• satisfaction with important aspects of one's life (for example, health, relationships, work);

• presence of positive affect [4].

Happiness plays an important role in physical and mental health. Anxiety, depression, stress and loneliness cause lowered immunity, increased inflammation, and decreased life expectancy [17]. Of all the different types of emotions, happiness leads to better health. In 2001 Danner, Snowdon & Friesen conducted an analysis of the content of handwritten autobiographies of Catholic sisters. They found that expression in the writing that was characterized by positive affect predicted longevity 60 years later.

Happiness can be expressed through:

- relaxed stance as a body language;
- smiling as a facial expression;
- a pleasant tone of voice.

Kane (2017) has distinguished with 15 ways in which happiness can be increased:

• choose to be positive and see the best in every situation;

- start each day with a smile;
- be good to yourself;
- find joy in the little things;
- walk in nature;
- create goals and plans to achieve what you want most;
- connect with others;
- do what you're most passionate about;
- take steps to enrich your life;
- live in the moment;
- ask for help when you need it;
- let go of sadness and disappointment;
- practice mindfulness;
- count your blessings and be thankful;
- laugh, and make time to play [27].

## Sadness

Sadness is considered to be one of the basic human emotions and it is a natural response to situations involving psychological, physical or emotional pain. Sadness emerges at both the behavioral and physiological levels. Characteristic features of sadness are crying and sobbing. This emotional state is characterized by feelings of disappointment, grief, hopelessness, disinterest, and dampened mood. Like other emotions, people experience sadness from time to time. In some cases, people can experience prolonged and severe periods of sadness that can turn into depression.

This type of emotion is sometimes expressed in a number of ways including:

- crying;
- sobbing;
- dampened mood;
- withdrawal from others;
- quietness;
- lethargy [4].

Many people enjoy listening to sad music or watching sad movies because crying can be emotionally soothing. Such positive personality traits as thoughtfulness, resilience and alertness can be fostered through sad experiences [9].

# Fear

Fear is one of the most basic human emotions that can also play an important role in survival. It is programmed into the nervous system and works like an instinct. Fear helps to protect us. It makes us alert to danger and prepares us to deal with it. Feeling afraid is helpful in some situations. Fear can be like a warning, a signal that cautions us to be careful. Fear is the word we use to describe our emotional reaction to something that seems dangerous. Fear is the emotional response to an immediate threat. Heart rate and respiration increase, muscles become tense, priming body to either run from the danger or stand and fight. Fear can be mild, medium or intense, depending on the situation and the person.

Expressions of fear can include:

- physiological reactions such as rapid breathing and heartbeat;
- attempts to hide or flea from the threat;
- facial expressions such as widening the eyes and pulling back the chin [4].

## Disgust

Disgust is a universal emotion – we all get disgusted by things, just as we all experience other -basic" emotions, such as happiness and sadness. Disgust was described by Ekman. Disgust can originate from a number of things, including an unpleasant smell, taste or sight. Disgust has many functions. Researchers believe that this emotion evolved as a reaction to foods that might be harmful. It protects us from products that might cause us harm, it can give us a moral compass and it keeps us away from things that remind us of our animal nature. The findings, published in the Philosophical Transactions of the Royal Society B: Biological Sciences, reveal six categories of disgust: sexual behavior, lesions and visible signs of infection, atypical appearance, poor hygiene, animals that are vectors of disease and food that shows signs of decay [45].

Disgust is often displayed through:

- facial expressions such as wrinkling the nose and curling the upper lip;
- turning away from the object of disgust;
- vomiting or retching as physical reactions [4].

## Anger

In anger people often think and act irrationally. Anger can be a powerful emotion characterized by feelings of agitation, hostility and frustration. Anger can play a significant role in fight response of a person. There are three types of anger: passive aggression, open aggression and assertive anger.

Anger is often characterized by:

- physiological responses such as sweating or turning red;
- facial expressions such as frowning;
- body language such as taking a strong stance;
- tone of voice such as speaking gruffly or yelling;
- aggressive behaviors such as hitting, kicking or throwing objects [4].

This type of emotion can have both mental and physical consequences. Anger can motivate person to take action and find solutions to things that are bothering him. However, uncontrolled anger can turn to aggression or violence and can have an impact on physical health of a person [2].

## Surprise

Surprise is another one of the six basic types of emotions described by Ekman. Surprise is the briefest of all the emotions, lasting a few seconds at most and is characterized by a physiological startle response following something unexpected. Other emotions can be very brief, but they can also endure much longer. Surprise has a limited duration. Within seconds, surprise passes as we figure out what is happening. This type of emotion can be positive, negative, or neutral.

Surprise can be displayed in a number of ways including:

• facial expressions such as widening the eyes, raising the eyebrows (but show more curve than seen in fear) and opening the mouth (the upper eyelids and jaws are more relaxed when expressing surprise);

• verbal reactions such as screaming or gasping;

• physical responses such as jumping back [4].

However, other theories and new research continue to explore the many different types of emotions and how they are classified. Emotions play a vital role in the development of a person. Emotions can help people to develop their personal behavior and to make sense of their relationships and eventually the place in the world.

### References

1. Atkinson, A., Dittrich, W. H., Gemmell, A. J., & Young, A. W. (2004). Emotion perception from dynamic and static body expressions in pointlight and fulllight displays. Perception, 33, 717–746.

2. Aviezer, H., Hassin, R. R., Ryan, J., Grady, C., Susskind, J., Anderson, A., Bentin, S. (2008). Angry, disgusted, or afraid? Studies on the malleability of emotion perception. Psychological Science, 19, 724–732.

3. Banse, R., Scherer, K.R. (1996). Acoustic profiles in vocal emotion expression. Journal of Personality and Social Psychology 70, 614–636.

4. Cherry K. (2019). The 6 Types of Basic Emotions and Their Effect on Human Behavior.

5. Cowen A., Keltner D. (2017). Self-report captures 27 distinct categories of emotion bridged by continuous gradients. Proceedings of the National Academy of Sciences, 114(38).

6. Ekman, P. (1965). Differential communication of affect by head and body cues. Journal of Personality and Social Psychology, 2, 726–735.

7. Ekman, P. (1972). Universals and cultural differences in facial expression of emotion. In J. R. Cole (Ed.), Nebraska symposium on motivation (pp. 207–283). Lincoln: University of Nebraska Press.

 Ekman, P. (1992). An argument for basic emotions. Cognition and Emotion, 6, 169–200. doi:10.1080/02699939208411068 9. Ekman, P. (1999) Basic emotions. In T. Dalgleish and T. Power (Eds.) The handbook of cognition and emotion. Pp. 45-60. New York.: John Wiley & Sons.

10. Ekman, P. (2003). Emotions revealed. New York, NY: Times Books.

11. Ekman, P., & Friesen, W. V. (1967). Head and body cues in the judgment of emotion: A reformulation. Perceptual and Motor Skills, 24, 711–724.

12. Ekman, P., & Friesen, W. V. (1971). Constants across cultures in the face and emotion. Journal of Personality and Social Psychology, 17, 124–129.

13. Ekman, P., & Friesen, W. V. (1972). Hand movements. Journal of Communication, 22, 353–374.

14. Ekman, P., & Friesen, W. V. (1978). Facial action coding system: A technique for the measurement of facial movement. Palo Alto, CA: Consulting Psychologists Press.

15. Ellsworth, P. C., & Scherer, K. R. (2003). Appraisal processes in emotion. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), Handbook of affective sciences (pp. 572–595). New York, NY: Oxford University Press.

16. Feldman Barrett, L., & Russell, J. A. (1999). The structure of current affect. Current Directions in Psychological Science, 8, 10–14.

17. Folkman, S., & Lazarus, R. S. (1986). Stress processes and depressive symptomology. Journal of Abnormal Psychology, 95, 107-113.

18. Fonagy, I., Magdics, K. (1963). Emotional patterns in intonation and music. Zeitschrift fur Phonetik 16, 293–326.

19. Frick, R.W. (1985). Communicating emotion: The role of prosodic features. Psychological Bulletin 97, 412–429.

20. Friesen, W. V., Ekman, P., & Wallbott, H. (1979). Measuring hand movements. Journal of Nonverbal Behavior, 4, 97–112.

21. Frijda, N. H. (1986). The emotions. Cambridge, England: Cambridge University Press.

22. Frijda, N. H. (2007). The laws of emotion. Mahwah, NJ: Erlbaum.

23. Frijda, N. H., & Tcherkassof, A. (1997). Facial expressions as modes of action readiness. In J. A. Russell & J. M. Ferna'ndez-Dols (Eds.), The psychology of facial expression (pp. 78–102). New York, NY: Cambridge University Press.

24. Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. Journal of Personality and Social Psychology, 57, 212–228.

25. Gross, M. M., Crane, E. A., & Fredrickson, B. L. (2010). Methodology for assessing bodily expression of emotion. Journal of Nonverbal Behavior, 34, 223–248.

26. Harrigan, J. A. (2005). Proxemics, kinesics, and gaze. In J. A. Harrigan, R. Rosenthal, & K. Scherer (Eds.), The new handbook of methods in nonverbal behavior research (pp. 137–198). New York, NY: Oxford University Press.

27. Heather Craig, BPsySc (2019) The Philosophy of Happiness in Life (+ Aristotle's View).

28. Hietanen, J. K., Leppa<sup>"</sup>nen, J. M., & Lehtonen, U. (2004). Perception of emotions in the hand movement quality of Finnish sign language. Journal of Nonverbal Behavior, 28, 53–64.

29. Izard, C. E. (1971). The face of emotion. New York, NY: Appleton-Century-Crofts.

30. Izard, C. E. (1992). Basic emotions, relations among emotions, and emotioncognition relations. Psychological Review, 99, 561–565.

31. Juslin, P.N., Laukka, P. (2003). Communication of emotions in vocal expression and music performance: Different channels, same code? Psychological Bulletin 129, 770–814.

32. Kendon, A. (2004). Gesture: Visible action as utterance. Cambridge, England: Cambridge University Press.

33. Kennedy-Moore, E., & Watson, J. C. (2001). How and when does emotional expression help? Review of General Psychology, 5, 187–212.

34. Kesebir, P., & Diener, E. (2008). In pursuit of happiness: Empirical answers to philosophical questions. Perspectiveson Psychological Science, 3, 117-125.

35. Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York, NY: Springer Publishing Company.

36. McNeill, D. (2005). Gesture and thought. Chicago, IL: University of Chicago Press.

37. Montepare, J., Koff, E., Zaitchik, D., & Albert, M. (1999). The use of body movements and gestures as cues to emotions in younger and older adults. Journal of Nonverbal Behavior, 23, 133–152.

38. Mozziconacci, S.J. (1998). Speech variability and emotion: production and perception. Doctoral thesis. Technische Universiteit Eindhoven, Eindhoven.

39. Osgood, C. E. (1966). Dimensionality of the semantic space for communication via facial expressions. Scandinavian Journal of Psychology, 7, 1–30.

40. Pekrun, R. (2006). The Control-Value Theory of Achievement Emotions: Assumptions, Corollaries, and Implications for Educational Research and Practice. Educational Psychology Review, 18, 315-341.

41. Pitterman, H., & Nowicki, S. (2004). A test of the ability to identify emotion in human standing and sitting postures: The Diagnostic Analysis of Nonverbal Accuracy–2 Posture Test (DANVA2–POS). Genetic, Social, and General Psychology Monographs, 130, 146–162.

42. Plutchik, R. (1980). Emotion: A psychoevolutionary analysis. New York, NY: Harper & Row.

43. Pollick, F. E., Paterson, H. M., Bruderlin, A., & Sanford, A. J. (2001). Perceiving affect from arm movement. Cognition, 82(2), B51–B61.

44. Reilly, J. S., McIntire, M. L., & Seago, H. (1992). Affective prosody in American sign language. Sign Language Studies, 75, 113–128.

45. Val Curtis and Mícheál de Barra (2018). The structure and function of pathogen disgust. Volume 373, Issue 1751.