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EMOTIONAL AWARENESS IN ISLAM: STUDY OF THE QUR'AN, HADITH, AND NEUROSCIENCE

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ABSTRACT

Emotional awareness is an individual's ability to consciously understand, recognize, and manage emotions. In Islam, the concept of emotional control receives significant attention, as reflected in the Quran and Hadith. This article aims to examine the alignment of Islamic teachings with modern neuroscience findings regarding the brain's mechanisms for processing emotions. A literature review approach was used to analyze Quranic verses, the Prophet's Hadith, and contemporary neuroscience research. The study's findings indicate that Islam not only regulates outward behavior but also encourages emotional control as part of worship and character building.
Keywords: Emotion, Hadith, Neuroscience, Quran

ABSTRAK

Kesadaran emosional adalah kemampuan individu untuk secara sadar memahami, mengenali, dan mengelola emosi. Dalam Islam, konsep pengendalian emosi mendapat perhatian yang signifikan, seperti yang tercermin dalam Al-Qur'an dan Hadis. Artikel ini bertujuan untuk mengkaji keselarasan ajaran Islam dengan temuan ilmu saraf modern mengenai mekanisme otak dalam memproses emosi. Pendekatan tinjauan pustaka digunakan untuk menganalisis ayat-ayat Al-Qur'an, Hadis Nabi, dan penelitian ilmu saraf kontemporer. Temuan studi menunjukkan bahwa Islam tidak hanya mengatur perilaku lahiriah tetapi juga mendorong pengendalian emosi sebagai bagian dari ibadah dan pembentukan karakter. Kata kunci: Emosi, Al-Qur'an, Hadis, Ilmu Saraf.
***Kata Kunci**: Emosi, Hadis, Neurosains, Quran*

INTRODUCTION

Emotions are a defining characteristic of human existence as both individual and social beings. Emotions provide the dynamics of human life. Someone who is overly emotional or lacking emotions is difficult to accept because they may act excessively or be insensitive to others. Emotions are crucial to human life; one way to manage them is through nurturing them from childhood. Emotions are an individual's psychological aspect that serves as the foundation for understanding emotional intelligence, how emotions can enhance achievement, performance, or achieve success in life, and how emotions can be managed to become intelligent emotions. Therefore, understanding emotions is the first step to understanding the essence of emotional intelligence (Sa'diyah, 2013).

Emotional intelligence is essential for humans, as life is full of challenges and obstacles. (Goleman & Daniel, 2015)defines emotional intelligence as a person's ability to motivate themselves, cope with frustration, control impulses, empathize, pray, regulate moods, and prevent stress from interfering with thinking ability. The human thought center, commonly known as the brain, consists of three main parts: the cerebrum, the cerebellum, and the brainstem. These three parts of the brain work together to control the body's systems.

The cerebrum is the part that processes all intellectual activity in the human brain. The cerebrum consists of two hemispheres, the left and right. These two hemispheres naturally have a very complex structure and different functions. The left brain is the part that controls IQ (Intelligence Quotient), while the right brain is the part that controls EQ (Emotional Quotient) (Wahyuningsih & sunni, 2020). The brain's emotional center is centered in the limbic system (Wulandari & Suyadi, 2019). The function of the limbic system is to regulate emotions. Before the human rational mind functions, the emotional mind develops first (Arieska Ovi et al., 2018). The limbic system includes the amygdala, hippocampus, and entorhinal cortex, which play a major role in human social and emotional behavior. The prefrontal cortex plays a role in memory and social behavior. There are several sub-areas in the prefrontal cortex, one of which is the orbitofrontal cortex, which is directly connected to the amygdala (Zelazo, et al., 2008).

Emotions are psychological responses that arise from certain stimuli and play a significant role in influencing a person's thoughts, behavior, and decision-making (Ananda et al., 2025). In the context of brain function, emotions are primarily processed in the limbic system, specifically the amygdala, which functions to detect situations perceived as threatening or important. When humans encounter an emotional stimulus, the amygdala

responds immediately and can trigger spontaneous reactions, such as anger or fear, even before the rational brain (neocortex) has time to consider them logically.

Daniel Goleman explains that people with good emotional intelligence are able to control the impulses that arise from the amygdala, preventing emotions from dominating decisions. In other words, the rational brain is given the opportunity to control emotional impulses so that actions remain wise.

From the perspective of the Qur'an, emotional control is closely related to Allah's command for humans to be patient, restrain their anger, and use common sense in facing any situation. As Allah says in QS. Ali Imran [3]: 134:

"(Namely) those who spend (in charity), both in times of ease and hardship, and those who restrain their anger and pardon people. Allah loves those who do good."

This verse shows that humans are taught not to let negative emotions control them, but rather are directed to remain patient, control their anger, and do good. This aligns with Goleman's principle that emotions need to be managed to prevent harmful actions.

Thus, it can be concluded that the brain's processes that regulate emotions and the teachings of the Quran both emphasize the importance of self-awareness, self-control, and the use of common sense in managing emotional impulses. Both guide humans toward living more calmly, wisely, and beneficially for others. This paper aims to analyze the compatibility between the brain's mechanisms in emotion regulation and the principles of emotional control in the Qur'an.

RESEARCH METHOD

Library research is a series of activities related to library data collection methods, reading, note-taking, and processing research materials. Data collection techniques use documentation, with primary sources in this discussion being books and literature related to this topic. Secondary sources include articles relevant to the research topic. The analysis technique employs an in-depth analysis approach, which involves analysing data or information thoroughly to identify underlying concepts

FINDINGS AND DISCUSSION

1. Emotional Awareness in Islam: A Narrative

Emotional awareness the ability to recognize, understand, and manage one's emotions and those of others is deeply embedded in the Islamic worldview. Far from being a mere psychological construct, emotional intelligence in Islam is both a spiritual and ethical imperative, rooted in the Qur'an and the Sunnah of the Prophet Muhammad (peace be upon

him). Islam promotes a balanced, reflective, and morally conscious approach to emotions, aiming not only at individual well-being but also at the harmony of society.

The Qur'an repeatedly encourages believers to be introspective and to regulate emotions in a way that aligns with taqwa (God-consciousness). For instance, Allah says, "And those who restrain anger and pardon people—Allah loves the doers of good" (Qur'an 3:134). This verse illustrates two key aspects of emotional awareness: self-regulation and empathy. The ability to suppress anger and replace it with forgiveness is not only an emotional skill but a spiritual act that earns divine love.

Moreover, the Prophet Muhammad exemplified emotional awareness in his interpersonal dealings. He showed compassion to the weak, patience with the ignorant, and deep sorrow in times of grief. His emotional expressions were never impulsive but guided by purpose and wisdom. For example, during the death of his son Ibrahim, the Prophet wept and said, "The eyes are shedding tears and the heart is grieved, and we will not say except what pleases our Lord"(al-Bukhari, n.d.) This shows that Islam does not suppress emotional expression but channels it through faith and understanding.

Islamic scholars have long discussed the role of emotions in ethical behavior. Al-Ghazali (d. 1111), for instance, emphasized the purification of the heart (tazkiyah al-nafs) as a prerequisite for moral action. He categorized emotions like anger, fear, love, and hope as forces that, when guided by reason and revelation, lead to spiritual excellence (ihsan). Without emotional awareness, one risks falling into extremes of either suppression or uncontrolled expression, both of which can harm the self and others(Al-Ghazali., 2007).

Modern Islamic psychologists also affirm the importance of integrating emotional awareness into spiritual practice. Malik Badri, a pioneer in Islamic psychology, argues that the Qur'anic model of the self (nafs) involves a dynamic interplay between emotional, cognitive, and spiritual faculties. Emotional awareness is thus a gateway to self-knowledge (ma'rifat al-nafs), which is crucial for self-discipline (mujahadah) and ethical maturity (Badri, 2000).

In conclusion, emotional awareness in Islam is a multidimensional concept that encompasses self-regulation, empathy, spiritual mindfulness, and ethical action. It is a vital element in the believer's journey toward inner peace and divine pleasure. Recognizing and managing emotions is not just a psychological tool but a deeply spiritual responsibility in the Islamic tradition.

Understanding Brain

The brain is the organ responsible for the experience of various sensations or stimuli, including the human ability to perform voluntary (conscious) movements. The brain also has the ability to carry out various mental processes, such as memory, emotional feelings, intelligence, communication, character or personality, and prediction. The weight of the adult brain minus the cerebrospinal fluid and its covering is approximately 1,400 grams, or 2% of body weight. Like cranial capacity (brain volume), there is no direct relationship between brain weight and intelligence level. A heavy brain does not necessarily mean intelligent, and a light brain does not necessarily mean stupid (Pasiak, 2008).

The brain is composed of a sheath composed of 2 types of important cells, namely Neurons and Glia Cells. The number of neuron cells consists of 10-15 billion cells with a total weight of 180 grams. The function of neuron cells is to transmit information and enable humans to think intelligently. Meanwhile, the number of glial cells in the brain is around 150 billion with a total weight of 420 grams. Glia cells function to feed neuron cells and support them to be strong and sturdy (Pasiak, 2008). The brain is part of the basic structure that becomes a person's modality in achieving the totality of their potential, especially in childhood. In children, brain development is in line with the development of cognitive skills which is marked by the growth of certain structures: (1) the frontal lobe which functions in planning, organizing new actions and maintaining attention to tasks, and (2) the temporal and parietal lobes, especially in areas that play a major role in language and spatial relationships (lateralization) (Danim, 2010 in Nurtaini, 2013)

Emotion

Emotion is a state or feeling that fluctuates within a person and is based on a fundamental principle. Daniel Goleman defines emotion as something that refers to a specific feeling and thought, a biological and psychological state, and a series of tendencies to act. Emotions can be categorized as anger, sadness, fear, pleasure, love, surprise, annoyance, or shame.

In the most literal sense, the Oxford English Dictionary defines emotion as any activity or agitation of the mind, feeling, or passion; any ardent mental state (Goleman & Daniel, 2015). Bahaudin (2000) states that the part of the human brain directly related to emotional processes is the amygdala, which is part of the limbic system. In relation to the thinking brain, the amygdala is able to take over control of the thinking brain's work in decision-making, meaning that decisions taken are heavily colored or controlled by feelings. Therefore, the working relationship between the amygdala and the neocortex is

the center of emotional intelligence where the amygdala acts as its emotional guardian. Goleman (2005) cites Salovey's basic definition of emotional intelligence which includes 5 (four) main things:

a. Recognizing one's own emotions. "Knowing oneself" represents the essence of emotional intelligence: awareness of one's own feelings as they arise. The ability to monitor feelings over time is crucial for psychological insight and self-understanding. The inability to distinguish between true feelings and feelings makes one dependent on them. People who are more confident about their feelings are better pilots in their lives.
b. Managing emotions. Emotions can include anger, anxiety, and sadness. Managing emotions involves how to deal with anger, anxiety, and sadness.
c. Self-motivation. Optimism a key motivator. Seligman defines optimism in terms of how people view their successes and failures. Optimists attribute failures to things they can change so they can succeed in the future; while pessimists accept failures as their own fault, viewing them as ingrained traits they cannot change. From an emotional intelligence perspective, optimism is an attitude that protects people from falling into apathy, despair, or depression when faced with adversity.
d. Recognizing other people's emotions. Empathy is a basic social skill. According to the original Greek, empathy comes from the word "empatheia," which means to share feelings. E.B. Titcher, an American psychologist (1920), used the term motor mimicry as the original technical meaning of empathy. According to him, empathy originates from a kind of physical imitation of another person's burden, which then evokes similar feelings in the person. This has implications for understanding others' feelings, thinking from their perspective, and appreciating the differences in others' feelings about various things.
e. Relationship-building skills. Handling other people's emotions, the art of building strong relationships, requires the development of two other emotional skills: self-management and empathy. With this foundation, the skills of building relationships with others will develop. A lack of these skills will lead to interpersonal disaster.

One of the keys to social competence is how well a person expresses his or her own feelings. Paul Ekman coined the term etiquette to indicate the appropriate feelings to show at the appropriate time. He said there are three ways to express feelings: (1) exaggerate, (2) downplay, (3) substitute.

Brain Work Process

The three parts of the human brain are also the right and left hemispheres. These two

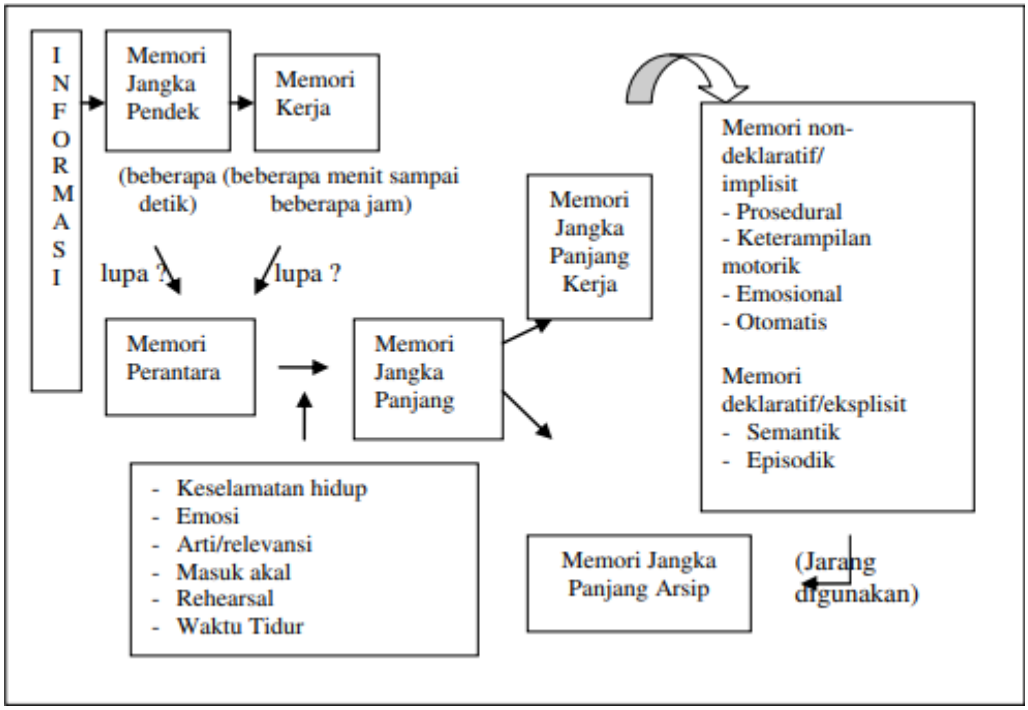
hemispheres are now better known as the right brain and the left brain. Experiments on these hemispheres have shown that each hemisphere is responsible for a person's thinking style, and each specializes in certain abilities, although there is some crossover and interaction between the two sides.

Left-brain thinking is logical, sequential, linear, and rational, as well as highly organized. While realistic, the left brain is capable of abstract and symbolic interpretation. Its thinking is attuned to the organized tasks of verbal expression, writing, reading, auditory association, finding details and facts, phonetics, and symbolism.

Right-brain thinking is random, disorganized, intuitive, and holistic. It aligns with nonverbal ways of knowing, such as feelings and emotions, awareness of sensations (sensing the presence of an object or person), spatial awareness, recognition of shapes, patterns, music, art, color sensitivity, creativity, and visualization. Left-brain and right-brain theories only involve the two hemispheres, ignoring or downplaying the role of the limbic system. This is because the limbic system is hidden within the cortex.

Humans possess more than one type of memory. Each memory has a unique information storage mechanism and is interconnected with each other. Information about the same thing can be stored in different memory storage locations. For clarity, these types of information are presented in the following figure.

Figure 1. Human Memory Distribution



Source:(Gunawan, 2003))

How the Brain Works in Managing Emotions

The oldest root of our sense of smell is the sense of smell, better known as the olfactory lobe, the cells that receive and analyze odors. From the olfactory lobe, a primitive emotional center begins to develop, eventually growing large enough to cover the upper part of the brainstem. In its early stages, the olfactory center consists of only a thin layer of neurons responsible for analyzing odors. These layers, which surround the brain and border the brainstem, are called the limbic system. This new neural region adds emotion to the brain's repertoire. When we are overcome by passion or anger, fall in love or recoil in fear, it is the limbic system that takes hold. As the limbic system grows, it hones two powerful tools: learning and memory.

The neocortex is the seat of the mind, containing centers that collect and interpret what the senses perceive. The neocortex adds to our senses what we think about feelings and enables us to have ideas, art, symbols, and fantasies. The neocortex enables precise adaptations for survival in hostile situations. This survival ability is due to the neocortex's talent for strategy, long-term planning, and other mental abilities.

The hippocampus and amygdala are two crucial parts of the brain, the amygdala specializing in emotional matters. If the amygdala were separated from the rest of the brain, it would result in an inability to grasp the emotional meaning of an event, commonly referred to as "affective blindness." The amygdala functions as a repository for emotional memory; signals from the senses enable it to scan for any experience that might indicate distress. This is why the amygdala occupies a strategic position in mental life, a kind of psychological sentry, challenging every situation and every perception by telegraphing an emergency message to the rest of the brain (Supradewi, 2010).

Anatomically, the emotional system is capable of acting independently of the neocortex. Some emotional reactions and emotional memories can form without cognitive or intentional involvement. The amygdala can store receptor memories of responses, allowing us to act without fully realizing why we do so, because a shortcut from the thalamus to the amygdala bypasses the neocortex. This shortcut allows the amygdala to serve as a repository for emotional impressions and memories that we would never have access to when fully conscious. When we are stressed (or anxious, or even overly excited), nerves connecting the brain to the adrenal glands located above the kidneys trigger the secretion of the hormones epinephrine and norepinephrine, which flow throughout the body to prepare every part of it for the emergency. These hormones activate receptors in the vagus nerve, and as the vagus nerve carries messages from the brain to regulate the

heart, it also carries signals back to the brain, which are stimulated by epinephrine and norepinephrine. The amygdala is the primary destination for these signals to the brain, and they activate neurons in the amygdala to signal other brain areas to reinforce the memory of what happened (Supradewi et al., 2010).

The connection between the amygdala (and related limbic structures) and the neocortex is both a battleground and a cooperative agreement between the head and the heart, the mind and the feelings. This connection explains why emotions are so crucial to effective reasoning, whether it's making wise decisions or simply thinking clearly. Neuroscientists use the term "working memory" to refer to the ability of attention to retain important facts in mind for solving a task or problem, whether it's a question or a test. The prefrontal cortex is the area of the brain responsible for working memory. However, the existence of circuits from the limbic brain to the prefrontal lobe means that strong emotional signals, such as anxiety, anger, and the like, can create neural interference, sabotaging the prefrontal lobe's ability to maintain working memory. This is why emotional turmoil is called "not being able to think clearly," and persistent emotional depression can create intellectual disabilities in children, crippling their ability to learn (Supradewi et al., 2010).

CONCLUSION

The brain is the organ responsible for the experience of various sensations or stimuli, including the human ability to perform voluntary (conscious) movements. The brain also has the ability to carry out various mental processes, such as memory, emotional feelings, intelligence, communication, character or personality, and prediction.The brain's emotions are centered on the limbic system. The function of the limbic system is to regulate emotions. Before the human rational mind can function, the emotional mind develops first. However, the existence of a circuit from the limbic brain to the prefrontal lobe means that strong emotional signals, anxiety, and depression can be transmitted to the brain. (Placeholder1) (Placeholder2)Anger, and the like can create a neural disturbance, which sabotages the prefrontal lobe's ability to maintain working memory. That's why when we're emotionally disturbed it's called "not being able to think clearly," and ongoing emotional depression can create defects in children's intellectual abilities, thus crippling their ability to learn.

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