

Rediscovering Unconsciousness Intuition the Suggested Hypothesis

Samah Khaled Zahran*

Personality and social psychologist, Ain Shams University, Egypt

*Corresponding author : Samah Khaled Zahran, Personality and social psychologist, Ain Shams University, Egypt

Received: 📅 August 04, 2022

Published: 📅 August 24, 2022

Abstract

This article is discussing briefly both nature of unconscious mind ability and the nature of intuition, concentrating more on intuition, as an aspect of unconscious mind. In a conductive deductive way, through related literature, the researcher suggests that intuition maybe one aspect of our unconscious mind's abilities, which supports human in quick adaptation, by reaching solutions or semi solutions suddenly, continually and unconsciously without awareness.

Keywords: Unconsciousness; Intuition; Neurology of unconsciousness and intuition; Unconscious information

Introduction

Unconsciousness

What is it? Unconsciousness realm refers to our internal process that occurs in an implicit manner outside our awareness. This may experience in deep sleep, general anesthesia, coma and fainting. In psychoanalysis, this domain of personality encompassing the repressed Id functions, the primitive impulses and desires, memories, wishes, images, that are too anxiety provoking to be accepted into our conscious mind [1]. The term "unconscious" was first coined by the philosopher Friedrich Schelling in the late 18th century and was later translated to English by poet Samuel Taylor Coleridge. Within the field of psychology, the notion of unconscious influences was touched on by thinkers including William James and Wilhelm Wundt, but it was Freud who popularized the idea and made it a central component of his psychoanalytic approach to psychology. The Swiss psychiatrist Carl Jung also believed that the unconscious played an important role in shaping personality. He also coined the concept of collective unconscious was said to contain inherited ancestral memories common to all of humankind. Modern psychologists continue to explore the influences of unconscious mental pro-

cesses including related topics such as unconscious bias, implicit memory, implicit attitudes, priming, and unconscious learning.

Neurology of unconsciousness

In his paper in 2017 Solms suggested conscious verses unconscious mind, through the activated areas of the brain in experimental studies. From the cognitive neuroscience perspective critical experiments were performed by Moruzzi and Magoun, who showed that consciousness in cats is generated not in the cortex but rather in the upper brain stem, in a region now known as the extended reticulate thalamic activating system (ERTAS). Confirmation that the same applied to humans was quickly forthcoming, for example, from Penfield and Jasper, who observed that consciousness is only lost during seizures when epileptogenic activity spreads to what they called the center cephalic region [2]. Cortical consciousness is dependent upon ERTAS arousal. Thus, whereas even a small amount of damage to the ERTAS causes coma, damage to large swathes of cortex results merely in a loss of certain forms of information. The smallest area of brain tissue whose destruction causes total loss of consciousness is located in the periaqueductal gray, stimulation of

which, importantly, produces the most extreme states of affective arousal (both pleasurable and unpleasurable, depending on the precise site that is stimulated [2].

That is why decorticate animals are conscious, as are children born without a cortex. These animals and children are totally devoid of cortical representations, yet they are awake and alert and display a wide range of emotional responses to adequate stimuli. This put paid to the notion that emotions only become conscious if they are registered in the (prefrontal or insular) cortex. There is absolutely no evidence for this. In fact, decorticate animals are excessively emotional, as are human beings with damaged prefrontal lobes. Likewise, preserved emotional consciousness can easily be demonstrated in patients whose insular cortex is destroyed [2]. Working memory can only hold roughly seven bits of information in mind (in consciousness) at any one point in time. That is why 95% of our goal directed activities are executed unconsciously. All non-falsified predictions are repeated (are stored in the corticothalamic preconscious and automatically executed), unless and until a prediction error arises. This (prediction error) releases what Friston calls free energy that is, increased entropy. In terms of information theory, increased entropy implies increased uncertainty; and in arousal terms, uncertainty implies salience. Prediction error therefore renders preconscious predictions salient again. Salience is signaled by arousal. An unmet need is what activates (hypercathects, as Freud put it) the memory traces that were meant to satisfy it. Only ERTAS arousal can produce the level of activation that is necessary for reconsolidation to occur. In this way, prior predictions (what Freud called wishes) are subjected reluctantly to the reality principle, and they are updated [2].

Freud's system preconscious in the cortex and his system unconscious in the non declarative memory systems located beneath the cortex, primarily in the basal ganglia and cerebellum. But the unconscious memory systems I have just described are conventionally called the cognitive unconscious, which is contrasted with the dynamic unconscious. Psychoanalysts acknowledge the existence of a cognitive unconscious (they call it the unconscious ego), but they point out that it excludes the dynamic processes that Freud discovered (which they call the repressed unconscious). Freud thought the repressed unconscious was part of the id. This, as I said at the outset, was his big mistake. The repressed is derived from cognitive (representational) processes, from learning, whereas the id consists of affective (nonrepresentational) processes and is innate. The parts of the brain that perform the functions that Freud called the id are located mainly in the ERTAS and limbic system, whereas the parts that perform the functions he attributed to the repressed (or the system unconscious) are located mainly in the basal ganglia and cerebellum. (There are, of course, multiple interactions between these systems. For example, the amygdala and nucleus accumbens (limbic nuclei) straddle the tail and head of the caudate nucleus (basal ganglia), respectively; and the basal ganglia, in turn, interact constantly with the prefrontal lobes [2].

Unconscious information

Referring to any gaining of information happens without awareness, as unconscious cognitive process and unconscious inference. Unconscious cognitive process refers to: any process involving thinking, reasoning, judging, problem solving, which takes place without consciousness, without awareness. Unconscious inference refers to a judgment made on the basis of a limited amount of evidence, or data made without awareness [1].

Intuition

What is it? Intuition is a mode of understanding or knowing characterized as direct and immediate, and occurring without conscious thought or judgment [1]. Our brain is constantly assessing and gathering information some of which we do with conscious awareness, and some are gathered completely unintentionally. The gathered information is stored as patterns of information. This information starts in short term memory and can then be forgotten or sent down the highway to the long term memory stores [3] Some information is recalled consciously, which is to say you have a complete awareness of the information (examples would include home address, names, and faces of loved ones, where you were and what you were doing when specific tragic events occurred, etc.). other information is not so easy to recall into conscious awareness. Simply because you cannot recall it does not mean, necessarily, that you've forgotten it. Occasionally you'll have something happen (or see something... or hear something) that will cause a memory of long ago to flood back into consciousness. This is an example of tacit knowledge knowledge that resides outside of everyday awareness [3]. Intuition according to know without knowing how you know.

There are many, many lessons stored in the brain. There is also genetic coding based on experiences of previous generations dating all the way back to your cave dwelling ancestors. Those experiences of long ago are sometimes termed instinct. All creatures possess instinct, and you do too. Intuition can provide you with early warnings often in the form of gut feelings, hair standing up on the back of your neck or feelings of impending danger or doom [3]. Under stress, the brain is gathering and processing many facts, much of which is happening outside of awareness. These facts, formed into patterns, are then sent into high brain processing areas and compared to past experiences. When you get that gut feeling you are benefiting from intuition a pattern match. However, if you make a decision based purely on intuition (or gut feel) and someone asks you for the proof and evidence, you may not be able to produce it. Remember, intuition and pattern matching happen OUTSIDE your conscious awareness, so you may find yourself being unable to articulate WHY you felt the way you did but you, nonetheless, sensed something was wrong [3]. Some writes see intuition as implicit learning, while others sees it as a kind of intelligence. In a meta-analysis of the literature on intuition, Hodgkinson et al state that while there have been many conceptualizations of the nature of intuition, there is a growing body of research that suggests underlying nonconscious elements, such as implicit learning and

knowledge and pattern recognition, which are involved in intuitive perception [4].

The root of the term intuition stem from the Latin word *intuere* which can be translated as looking, regarding, or knowing from within. Gerard Hodgkinson concludes that intuiting is a complex set of interrelated cognitive, affective, and somatic processes, in which there is no apparent intrusion of deliberate, rational thought. He also concludes that the considerable body of theory and research that has emerged over recent years clearly demonstrates that the construct of intuition has emerged as a legitimate subject of scientific inquiry that has important ramifications for education, personal, medical and organizational decision making, personnel selection and assessment, team dynamics, training, and organizational development. Another comprehensive review of the intuition literature defined intuition as affectively charged judgments that arise through rapid, nonconscious, and holistic associations. Damasio also suggests that the outcomes of intuition can be experienced as a holistic hunch or gut feel, a sense of calling or overpowering certainty, and an awareness of a knowledge that is on the threshold of conscious perception. Several authors have contended that intuition is an innate ability that all humans possess in one form or another and is arguably the most universal natural ability we possess. They also suggest that the capability to intuit could be regarded as an inherited unlearned gift [4]. Intuition has been evaluated as the capacity that allows people to mature and meet the challenges and stresses of everyday life with resilience and make more intelligent decisions by aligning with their own innate higher order wisdom and expression of care and compassion, which we often think of as elements of living a more conscious life [4]. Lieberman MD in his paper in 2000, suggested intuition as a kind of implicit learning. In recent years, researches on implicit learning said that "our behavior can be rule like adaptive one without conscious insight", this is the similarity between implicit learning and intuition, and suggest experience associated with knowledge gained directly [5]. The other aspect related to intuition, he added, in everyday experience, is in social learning and nonverbal communication. Nonverbal decoding, attitudes, emotions, all are sequential unconscious sudden gained cognition [5].

Neurobiology and physiology of intuition

Many papers conducted by Institute of Heart Math (IHM), through dozens of years, shown how do we think, feel, and take decisions, not only by our brains, but also by our heart neural network system. Deo A and others, in their paper in 2019, shown that, there are three key neural systems, or brains; one in the actual brain, the other in the heart, while the third in the gut feelings, all are involved in decision making, consciously and unconsciously, logically, and intuitively [6]. Another study confirmed that intuition is related with synchronization between the activity of the heart and the brain. Psychophysiological coherence is similarly associated with beneficial psychological correlates, including reduced perception of stress, sustained positive affect, and a high degree of mental clarity and emotional stability. In contrast to dissociative states such as

relaxation, the coherence mode promotes calm, balanced, yet alert and responsive psychological state that is conducive to everyday functioning, including problem solving, decision making, and the performance of tasks requiring mental acuity, focuses, and creativity found by [4]. Controlled studies have shown that maintaining a state of psychophysiological coherence is associated with significant improvements in cognitive performance, including both long term and short-term memory, as well as reaction time on a task requiring focused attention and accurate discrimination [7].

Another important link is provided by electrophysiological data from a current study, which showed that the neurological signals sent from the heart to the brain are involved in the processing of intuitive information. Using a rigorous experimental design, this study found objective electrophysiological evidence that both the heart and the brain receive and respond to information about a future event 3 to 5 seconds before the event actually happens. Even more surprising was their finding that the heart appears to receive this intuitive information approximately 1.5 seconds before the brain. Results of event related potential and heartbeat evoked potential analyses suggest that the heart's afferent input to the brain may contain information pertaining to the future stimulus, thereby informing intuitive perception. Their data further indicated that during a state of psychophysiological coherence, the processing of pre stimulus information in the brain is modified by the heart's afferent signals. These data point to a clear role for the heart in the psychophysiological processing of intuitive information and suggest that such processing is enhanced by maintaining the coherent state [7]. It is speculated that this provides a mechanism by which nonlocal information can be transmitted at hyper speeds, by a quantumholographic process, across macro and micro scales of organization, thus enabling us to have accurate foreknowledge of objects distant in space or events ahead in time [7].

Mc Craty in his paper in 2014 suggested that intuition is a kind of neural process between brain and heart, where brain matches the kind of new problems or challenges with what stored in memory based on previous experience. Another suggestion is that intuition is a kind of energetic sensitivity, enables us with our neural systems to detect and respond to environmental signals, as electromagnetic fields, or earthquakes. Finally, intuition is a nonlocal phenomenon, as psi postulated through quantum physics [4]. The heart is in continuous communication with the brain and body through multiple pathways neurologically (through the autonomic nervous system) biochemically (through hormones), biophysically (through pressure and sound waves), and energetically (through electromagnetic field interactions). The heart is uniquely well positioned to act as the global coordinator in the body's symphony of functions to bind and synchronize the system as a whole. Because of the extensiveness of the heart's influence on physiological, cognitive, and emotional systems, the heart provides a central point from which the dynamics of the psychophysiological systems can be self-regulated. There is compelling evidence to suggest that the physical heart is coupled to a field of information that is not bound

by the classical limits of time and space. This evidence comes from a rigorous experimental study that demonstrated that the heart receives and processes information about a future event before the event actually happens [4]. Lindhard T in her paper in 2020, suggested that not only heart and brain are involved in intuition, but also we have multi sensory systems, as in skin (ectoderm), with its receptors it perceive signals, so that perception and intuition is not linked to local perception of neural systems only [8].

Methodology

Methodology by its aim and main question depends on logical induction deduction from the related studies and previous mentioned introduction.

The aim of this paper

The aim of this paper is to suggest a hypothesis about the nature of intuition.

The main question is

Does intuition relate to unconscious process?

Discussion, Conclusion and the suggested hypothesis

Intuition is a kind of direct knowledge, gained in adaptive behaviors, supports us in decision making. Some people have correct intuition almost the time, while others have not. Unconscious process is the same; give us direct knowledge without knowing the procedures and the how. We store in our implicit memory our experiences, and recall them unconsciously, through implicit learning. We depend up on our neurons in brain and heart systems, as well as, our ectoderm, to detect the surroundings, and to adapt to the current and the coming events. Intuitive perception is a kind of complex set of interrelated cognitive, affective, and somatic process, with no apparent rational thought, charged by rapid, unconscious behavior [9]. Intuition has been evaluated as the capacity that allows people to mature and meet the challenges and stresses of everyday life with resilience and make more intelligent decisions

by aligning with their own innate higher order wisdom and expression. We may conclude and suggest a hypothesis that: Intuition is a kind or one aspect of our unconsciousness; we utilize implicit and hidden unconscious stored experiences, to adapt to our surrounding intuitively. We need intuition, and unconscious mind for fast adaptation, sometimes we need to respond quickly to avoid danger or painful events, nothing supports us, to keep us away from danger; more perfect than our unconscious mind, and intuition. Intuition is an innate nature, inherited, unlearned gift, as some of other beings have. We do not believe anything beyond logic, but we have to discover the realm of unconscious mind, as Freud begun. Intuition is not a pseudoscience if we begin to study it experimentally, as one aspect of our hidden, unconscious mind.

References

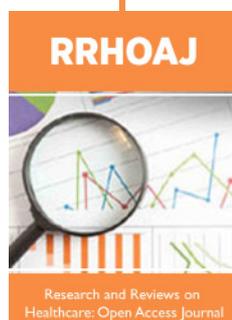
1. Reber AS (1995) Dictionary of psychology, second edition, Penguin books, England.
2. Solms M (2017) What is the unconscious, and where is it located in the brain? A neuro psychoanalytic perspective. *Annals of The New York Academy of Sciences*.
3. Gasaway R (2022) Where Does Intuition Come From?
4. Mc Craty, R (2014) Intuitive Intelligence, Self-regulation, and Lifting Consciousness. *Global Adv Health Med* 3(2): 56-65.
5. Lieberman MD (2000) Intuition: A Social Cognitive Neuroscience Approach. *Psychological Bulletin* 126(1): 109- 137.
6. Deo A (2019) Head, Heart, and Gut in Decision Making: Development of a Multiple Brain Preference Questionnaire. Sage pub.
7. Tomasino D (2007) The Psychophysiological Basis of Creativity and Intuition: Accessing the Zone of Entrepreneurship. *International Journal of Entrepreneurship and Small Business*.
8. Lindhard T (2020) Intuition: A Heart based Epistemology. *The Annual Virtual International Conference on the Dialogue between Science and Theology (Dialogo Conf 2020 Vic)*.
9. Mc Craty, R (2014) Intuitive Intelligence, Self-regulation, and Lifting Consciousness. *Global Adv Health Med* 3(2): 56-65.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here: [Submit Article](#)

DOI: [10.32474/RRHOAJ.2022.07.000273](https://doi.org/10.32474/RRHOAJ.2022.07.000273)



Research and Reviews on Healthcare: Open Access Journal

Assets of Publishing with us

- Global archiving of articles
- Immediate, unrestricted online access
- Rigorous Peer Review Process
- Authors Retain Copyrights
- Unique DOI for all articles