



	<p style="text-align: center;"><u>HUMAN THINKING HUB-HEART OR BRAIN: EXPLORING THE RELIGIOUS AND SCIENTIFIC PERSPECTIVES</u></p>
Author (s)	Muhammad Mobeen Tahir ¹ Sana Tabbasum ²
Affiliation (s)	¹ M.Phil. Scholars, Department of Islamic Studies, University of Sargodha ² M.Phil. Scholars, Department of Islamic Studies, University of Sargodha
Article History:	Received: Feb. 05. 2024 Reviewed: Mar. 05. 2024 Accepted: Mar. 15. 2024 Available Online: Mar. 31. 2024
Copyright:	© The Author (s)
Conflict of Interest:	Author (s) declared no conflict of interest
Homepage:	https://theijrah.com/index.php/Journal/index
Article Link:	https://theijrah.com/index.php/Journal/issue/view/4

HUMAN THINKING HUB-HEART OR BRAIN: EXPLORING THE RELIGIOUS AND SCIENTIFIC PERSPECTIVES

Muhammad Mobeen Tahir¹

Sana Tabbasum²

ABSTRACT

The heart and brain are the two most important organs of the human body. Today, it is a well-known fact that the heart's main function is to supply blood throughout the body, while similarly, the brain controls all the functions of the body. In the past, scientists, philosophers, and religious scholars were divided on this subject. Some of them were of the view that the heart is the hub of thinking, while others argued that it is the brain or mind which controls the thinking aspects. In this regard, ancient religious texts of Abrahamic religions, including Torah, Bible, and Quran inform us about the importance of the heart. Since the early modern ages, the brain has been considered as the main thinking organ of the body, and the heart was no longer considered as the thinking center. However, during recent experiments and studies, it has been found that the heart also has a little brain capable of independent thinking. These findings have opened up a new avenue for research and debate amongst the scientists and religious scholars from all across the world, thus prompting the scholars and scientists to study the neglected sacred text and findings of the past. Hence, there is a need to discuss religious and scientific perspectives about the subject. This will explore the importance of religion and ancient ideas related to advanced medical treatments and ethical considerations, ultimately, leading to well-being of humankind. Therefore, an effort has been made to arrange scattered knowledge on the subject to formulate a simple guideline for scholars for future research.

Key Words: *Thinking Hub, Heart, Brain, Religious Texts, Abrahamic Religions, Early Modern Age, Heart-Brain.*

¹ M.Phil. Scholars, Department of Islamic Studies, University of Sargodha

² (M.Phil. Scholars, Department of Islamic Studies, University of Sargodha

Introduction

The search to know that whether heart thinks or the brain thinks has attracted scholars across times, who carried out research from either religious or scientific angles separately. This article will discuss the religious and scientific perspectives on the subject. The ancient religious texts gave due importance to the heart. These provide moral aspects of the heart. Whereas, it is considered by modern sciences that brain is the information processing center of the body. There are some interesting questions that come to one's mind: Can the study of sacred texts on the subject have some relevance with modern scientific findings? Is the today's world's perception that religion offers useless ideas is not correct? Can we utilize the vast reservoir of ignored knowledge found within religious texts for future research? For the same reason, subject will be discussed using references from religion and science with a view to give suitable recommendations for betterment of humanity.

Literature Review

A number of scholarly studies are available on the topic. Muhammad Omer Saleem's study, "The Heart, Mind, and Spirit,"¹ explains heart's role in emotions and mentality. His work establishes connection between blood pressure, pulse and emotions. He is of the view that heart has a magnetic field whose strength is much greater than brain's magnetic field. This magnetic field can extend outside the body as well. Saeed Ahmad's paper "Center of Thinking, Human Heart or Brain: Introduction and Analysis"² explains that both heart and brain can think, however, having different domains and roles to perform. And that the brain is related to spirit. Samina Farooq's study, titled "Thinking Begins in the Heart,"³ signifies importance of the heart according to the teachings of the Quran and Hadith. She informs us that how this topic initiated debate among her colleagues, many of them are of the view that heart is only a symbol of love and emotion. Similarly, Torah, Bible, and Quran contain verses emphasizing the importance of the heart. However, there is a shortcoming in contemporary literature about this subject. No previous discussion has been carried out on this subject to study ancient religious texts for the purpose of scientific research. At present there is no integrated approach between religion and science to determine whether the heart or the brain is responsible for thought process. This article aims to encourage collaboration between religious scholars and scientists to explore both religious and

scientific aspects of the subject. Therefore, both aspects will be discussed to get positive outcome. Scholars are invited to adopt this approach for future discoveries on various topics.

Research Methodology

The qualitative and quantitative analysis has been adopted. Review of existing literature on the subject has been carried out. Internet websites have been consulted to research the latest knowledge on the topic. YouTube channel was utilized for witnessing the lecture of a prominent Scholar. Related survey on subject conducted by a medical company from gen public was also studied. Mufti Taqi Usmani's English Translation of the Holy Quran has been consulted.

Ancient Theories In Favour Of Heart

Ancient Egyptians were of the idea that the heart houses thought and soul. Heart controls sensation, body movement and other parts of the body. After a human dies, it is the heart that determines their fate⁴. The god of mummification, Anubis, weighs a feather against the heart. If the heart is heavier than the feather, the terrifying creature called Ammit would consume it. However, if the heart is lighter, it means that human spirit is allowed to move to the heavens. That's why Egyptians used to preserve the hearts inside mummies while removed other organs from the body. Aristotle (384-322 BC) observed animal dissection and strangulation. He found out that some animals could move and feel without the brain, he concluded that the brain alone is not responsible for movement or feelings. He proposed that the heart controls the physiological and psychological systems of the body. He pointed out that the heart is the origin of the veins in the body. And the pneuma signals are generated from the heart, which moves through blood vessels and produce sensation in the body.⁵ Avicenna (980-1037 AD) in his book "Cannon of Medicine" argued that when a human decides to move, it starts in the heart and then goes to the brain.⁶ Albertus Magnus(1200-1280 AD), a German researcher gave an idea that nerves come out from the brain but origin is the heart and that matters originate from the heart.⁷ English Physiologist William Harvey (1578-1657 AD) was the first one who described the function of the circulatory system in human's body. The heart pumps blood to all parts of human's body. In his book "De Motu Cordis et Sanguinis in Animalibus", he said that the Heart is the source of life and the centre of human's body.⁸

Ancient Theories In Favour Of Mind

Praxagoras (340-280 BC) was of the idea that it is the brain that controls the body.⁹ He suggested that the brain houses the soul. Plato (428-348 BC) elaborated, stating that the mind and soul reside within the body. Upon death, the mind and soul separate from the body. However, none of these die.¹⁰ Hippocrates (460-370 BC) gave an idea that brain is the hub of both the intelligence and the soul. In his book "De morbo sacro," he mentioned human's brain's role in comprehension, sensation and controlling the body. He further said that sensations and emotions are initiated by brain¹¹. Galen (129-216 AD) gave an idea that brain controls our thoughts and senses. Moreover, nerves originate from both the brain and the spinal cord.¹²

Religious Perspective

The heart has been discussed several times in Torah. In Exodus, it is mentioned that Pharaoh was not freeing the Children of Israel due to his heart's refusal.¹³ In Deuteronomy, It is stated that if someone is involved in disobedience of God and turns his heart away, he will be destroyed.¹⁴ I Kings inform us that God granted wisdom in Heart of Solomon (AS).¹⁵ Deuteronomy tells us that Commands of God must be obeyed with sincere heart.¹⁶ The Bible also sheds light on the importance of heart. Luke informs us about the righteous hearts and the wicked hearts. A human speaks of what is inside his heart.¹⁷ In Matthew, it is stated that people with pure hearts will only be able to see God.¹⁸ One must love the God with complete heart, soul, and mind.¹⁹ Quran emphasizes a lot of importance to Heart. Quran states that:-

يَوْمَ لَا يَنْفَعُ مَالٌ وَلَا بَنُونَ ۚ إِلَّا مَنْ أَتَى اللَّهَ بِقَلْبٍ سَلِيمٍ ۝

"The Day when neither wealth will be of any use (to any one) nor sons, except to him who will come to Allah with a sound heart"²⁰

Quran guides us that:-

أَفَلَا يَتَدَبَّرُونَ الْقُرْآنَ أَمْ عَلَى قُلُوبٍ أَقْفَالُهَا ۝

"Then do they not give serious thought to the Quran, or do they have locks on their hearts?."²¹

Heart is mentioned One Hundred and thirty two times in Quran directly or indirectly, narrating its different ethical qualities.²² Doctor Israr Ahmed (Late), Pakistan is of the opinion that Human structure comprises of soul, life and body. Development of body and life start in Mother's womb

from day one. However, soul is put into heart of under developed baby on day number One Hundred and twenty by God. All spirits are made by God before creation of the world. In Sura Al Araaf, Quran, it is mentioned that God gathered all the spirits and asked “who is your Creator, All replied You are our Creator”. The spirits of all mankind already do exist. So the Qalb means Spirit which resides inside the heart. It can see without eyes, hear without ears and can estimate the things. According to him science is still not been able to explain human spirit. Science has only been able to prove visible body and life.²³

Modern Scientific Perspective

Since 1990s, Heart Math Institute California has been conducting research on the human heart’s role in producing feelings and emotions. It has been observed that the brain and heart are in constant conversation with one another, but number of messages sent from the heart is more as compared to brain. In fact, heart is a sensory organ which acts as an information hub. It has a complex nervous system. It is a cardiovascular brain. Heart consists of circuits that facilitate heart to perform intelligence tasks.²⁴

In 1990s, Doctor Andrew Armour made major discoveries about the heart's capabilities. He identified “Intrinsic Cardiac Adrenergic cells” inside heart. He found out that heart is an independent organ which has its own system called “heart-brain”²⁵. His findings revealed that the heart has its own nervous system, which has forty thousand neurons, duly connected to brain. He found out heart’s role in regulating body functions.

Analysis

It is an interesting fact that Torah was revealed on Moses (AS) in 15 Century BC²⁶, Bible on Jesus (AS)(4 Century BC to 30 CE)²⁷ and Quran on Prophet Muhammad (SAW) in 7th Century AD.²⁸ Different characteristics of heart are already mentioned number of times in Old Testament, New Testament²⁹ and Quran as under:-

Organ	Old Testament	New Testament	Quran
Heart	576	149	132

The question arises as to how the ancient human could have known the hundred of ethical characteristics of Heart? Either they had some sophisticated devices for investigations which

seem to be impossible or this must be some divine knowledge from the God for the right guidance of the human beings. Today Muslims all across the world firmly believe that God send all revelations upon Prophet Muhammad’s (SAW) Heart. Thus, the later seems to be true.

The science normally focuses on the live human beings. There is another aspect which needs attention and further research i.e what is the behavior of heart and brain when we sleep? Whether these two organs work for quite some time after human’s death? What is a sixth sense and whether it is related to heart or brain? What is a human soul and whether it is related to heart or brain? What is a possible disposal of soul after human’s death? Why cardiac arrest occurs instead of brain arrest when a man gets a sudden emotional shock? It is pertinent to mention here that as per Science Daily website, millions of people die annually in the world because of heart diseases as described below ³⁰:-

Serial No	Year	Deaths World Wide
1.	1990	12.4 Millions
2.	2022	19.8 Millons

These heart diseases can easily be prevented by avoiding alcohol, tobacco and immoral activities. Religion can play a major role to aware and groom public to avoid unethical practices to avoid heart diseases. Similarly evil doings in a society i.e cheating, lying, crime, and integrity related issues can be solved by moral and religious grooming of public. Religion always teaches for good. In these ways sufferings of a society can be minimized. For example, it is a common practice between Muslims that they pray five times a day. Before praying they wash and clean their body. They move and cover a certain distance to reach the Mosque and stand in front of God. In this way remain away from immoral activities and also walk five times a day. It is a normal belief in Muslims that prayers provide relief and peace to heart. However, a research was carried out by Medical Research Buyer’s Guide in West to check the perception of people about heart and mind that which one thinks. A survey was conducted from approximately One thousand individuals from all walks of life who gave their vote for establishing human thinking hub³¹. Results are as under:-

Serial No	For Heart	For Mind	Both
1.	21%	79%	None

It is quite interesting that when it comes to thinking most of people say that it is the domain of brain; however, some people are choosing heart on the matter of liking, disliking or expressing emotions. It is a common practice now a days that on social media platforms like whatsapp and Fb etc people used to express their liking or disliking by posting either hearts or thumb signals. There might be a few people who use brain to express feelings. This shows that how a common man and social media companies use hearts at their platforms. Moreover, people are seen buying more number of heart posters and stickers on mother's day and valentine days across the world as compared to brain posters. In fact no one buys brain posters.

Last and the unique aspect is that: now a day, there is a lot of violence, terror and greed found in this world. Human brain is taking the nations to wars and conflicts due to calculated vested interests without considering the sufferings of humanity. All religions advocate love. The heart perspective can be used for harmony between religions and nations across the globe. This option can be utilized as a method of conflict resolution across the world. If enemies start to talk as per heart perspective, wars can be avoided. After going through the all above mentioned discussion, heart and brain is characterized as under:-

Serial no	Heart	Brain
1.	Emotions, Ethics and morality	Logics, Calculation and estimation
2.	Supply blood throughout body	Process the information
3.	Love and hate	knowledge
4.	Located inside human chest	Located inside head
5.	Has system of neurons	Has system of neurons
6.	Emphasis given by Abrahamic faiths	Emphasis given by contemporary scientists
7.	Thinking organ of human body, responsible for blood circulation	Thinking organ of human body, controls body movements

In modern world, it has been commonly observed that scientists do not like intervention of religion in scientific procedures. In fact, belief on sacred religious texts is considered as a matter of personal faith in different regions of the world. After latest discoveries about heart, ancient scriptures are inviting scientists and researchers to explore valuable knowledge. However, it is important to approach both religion and science with a complete understanding. All efforts must

be done that while doing so sentiments of all must be respected. Thus, a dialogue between religion and science is necessary. At universities levels there is a need to formulate committees comprising scholars from religion and science for combined research purpose.

Conclusion

Exploration of sacred texts on the subject has due relevance with modern scientific discoveries. Today's world's perception that religion offers useless ideas is not correct. We can utilize the vast reservoir of ignored knowledge found within religious texts for future findings. It is evident that apart from supplying blood to the body, heart has a system of thinking as well called "Heart-Brain". Hence, it is proved that in addition to brain, the heart is also responsible in thinking and decision making process. Importance of Heart with regards to thinking is mentioned in religious texts of all Abrahamic faiths which are thousands of years old. Quran mentions one hundred and thirty two ethical characteristics of Heart. Similarly, Torah and Bible also mentions about heart as a symbol of morality. New avenues have been opened up for advanced medical treatments of heart. The study of religion for the purpose of scientific research is necessary for well being of human kind. Science has only been able to describe about physical body and evolution of life, however, still not been able to fully explore the real moral qualities of the Heart.

Recommendations

1. The integrated study of religion and science for the purpose of wellbeing of humanity may be encouraged across the renowned universities of the world.
2. Researchers may be encouraged to explore ancient religious text and scientific theories together; same will contribute towards improved health, advanced medical treatments and quality of lives of humans ultimately saving the lives.
3. This article may be published in renowned research journal/ magazine as a guideline of students and researchers for further research.
4. The contents of this article may be shared with the students of colleges/universities.

References

- ¹ Muhammad Umer Saleem, "The Heart Mind and Spirit", Royal College of Psychiatrists.com, accessed Mar 13, 2024, https://www.google.com/search?q=heart+brain+concept&oq=heart+brain+concept&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRigAdIBCjEwMTkxajBqMTWoAgCwAgA&sourceid=chrome&ie=UTF-8
- ² Saeed Ahmad, "Center of thinking, Human Heart or Brain: Introduction and analysis", Al-Qqalam.com, accessed Mar 20, 2024, <https://www.alqalamjournalpu.com/index.php/Al-Qalam/article/view/2146>
- ³ Samina Farooq, "Thinking begins in the heart", Understandquran.com, accessed Mar 13, 2024, <https://understandquran.com/thinking-begins-heart/>
- ⁴ Joshwa M Mark, "The Egyptian life and the feather of truth", World history encyclopedia, accessed Mar 13, 2024, <https://www.worldhistory.org/article/42/the-egyptian-afterlife--the-feather-of-truth/>
- ⁵ Thomas Brandth and Doreen Huppert, "Brain beats heart-a cross cultural reflection", National lib of medicine.com, accessed Mar 13, 2024, <https://pubmed.ncbi.nlm.nih.gov/33704411/>
- ⁶ A R Shamsi and Hassan Shamsi, "Avicenna's contribution to cardiology", National lib of medicine.com, accessed Mar 13, 2024, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3952394/>
- ⁷ George M Stratton, "Brain Localization by Albert Magnus and some earlier writers", JSTOR.com, accessed Mar 13, 2024, JSTOR, <https://www.jstor.org/stable/1414252>
- ⁸ Dominico Ribbatti, "William Harvey and the discovery of the circulation of the blood", National library of medicine, accessed, Mar 13, 2024, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2776239/>
- ⁹ Constantine and Peter, "The ancient Greek Discovery of the nervous system", Science direct.com, accessed Mar 13, 2024, <https://www.sciencedirect.com/science/article/abs/pii/S0967586816000187>
- ¹⁰ Douglas R. Campbell, "Plato's Theory of Reincarnation", Phil Archive, accessed Mar 13, 2024, <https://philarchive.org/archive/CAMPTO>
- ¹¹ T Brietenfeld, D Brietenfeld, M Jurasic, "Hippocrates-the forefather of neurology", National library of medicine, accessed Mar 13, 2024, <https://pubmed.ncbi.nlm.nih.gov/25027011/>
- ¹² F R Freemon, "Galen's ideas on neurological function", National library of medicine", accessed Mar 13, 2024, <https://pubmed.ncbi.nlm.nih.gov/11618827/>
- ¹³ Exodus 7:14
- ¹⁴ Deuteronomy 30:17-18
- ¹⁵ I Kings 10:24
- ¹⁶ Deuteronomy 6:5
- ¹⁷ Luke 6:45
- ¹⁸ Matthew 5:8
- ¹⁹ Matthew 22:37
- ²⁰ Al Quran, 26:88-89
- ²¹ Al Quran, 47:24
- ²² "The human heart is mentioned many times in the Quran", Jannatalquran.com, accessed Mar 13, 2024, <https://www.jannatalquran.com/2017/11/16/human-heart-quran/>
- ²³ Dr Israr Ahmed, "Science says Brain and Quran says Heart ways", Visual Islam TV, accessed Mar 13, 2024, Youtube.com
- ²⁴ Science of the heart, Heartsmath institute.com, accessed Mar 24, 2024, <https://www.heartmath.org/research/science-of-the-heart/>
- ²⁵ Ibid1
- ²⁶ Christopher Eames, "The Antiquity of the Scriptures: The Torah", Armstrong institute of Biblical Archeology.com, accessed Mar 13, 2024, [https://armstronginstitute.org/80-the-antiquity-of-the-scriptures-the-torah#:~:text=The%20Torah%E2%80%94traditionally%20attributed%20to,%2C%20Deuteronomy%2031%3A9\).](https://armstronginstitute.org/80-the-antiquity-of-the-scriptures-the-torah#:~:text=The%20Torah%E2%80%94traditionally%20attributed%20to,%2C%20Deuteronomy%2031%3A9).)
- ²⁷ "Jesus", Britannica.com, accessed Mar 13, 2024, <https://www.britannica.com/biography/Jesus>
- ²⁸ Ibid 23
- ²⁹ Brad Hicks, "The Heart in Scripture: Heart in Torah (Part 1)", LouderforMalchus.com, accessed Mar 24, 2024, <https://louderformalchus.com/2021/08/11/the-heart-in-scripture-heart-in-torah-part-1/>
- ³⁰ Sciencenews, Sciencedaily.com, accessed Mar 24, 2024, <https://www.sciencedaily.com/releases/2023/12/231211114621.htm#:~:text=Global%20death%20counts%20due%20to,at%20553%20deaths%20per%20100%2C000.>
- ³¹ Marcel Schwantes, "Head or Heart", Inc.com, accessed Mar 24, 2024, Inc. <https://www.inc.com/marcel-schwantes/new-research-answers-question-should-you-follow-your-head-or-your-heart-to-experience-more-happiness-at-work.html>