



NEUROSCIENCE AND COMPLIANT DECISION MAKING

ZOHAR MOR (ZOE) ADV.

B.A., LL.B, LL.M

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Neuroscience is the study of the nervous system, which includes the brain, spinal cord, and peripheral nerves. It is a rapidly growing field that is shedding new light on how the brain functions and how it is related to behavior and decision making. One area of neuroscience that has gained a lot of attention in recent years is the study of compliant decision making.

Compliant decision making refers to the process by which individuals make decisions that conform to the expectations of others, rather than their own preferences or beliefs. This can occur in a variety of settings, including the workplace, social interactions, and political decision-making. While it is a behavior that is often seen as negative, as it can lead to poor decision making and loss of autonomy, when dealing with compliance with regulation and instructions (intrinsic and extrinsic), compliance is an important factor, in achieving goals and in maintaining a regulated organization and societies.

There are several factors that contribute to compliant decision making. One is social pressure, which can come from a variety of sources, including peers, family members, and authority figures. People may also feel pressure to conform to the norms of their culture or society. Another factor is cognitive biases, such as groupthink, which can lead individuals to make decisions based on the opinions of others, rather than their own reasoning.

Recent research in neuroscience has revealed that compliant decision making is linked to activity in specific brain regions and functions:

1. **The amygdala**, which is involved in emotion and decision making, and activated when individuals are faced with social pressure. The amygdala plays a crucial role in emotional processing, emotional memory, decision making, emotion regulation, and social behavior. It helps the body to respond to emotionally charged stimuli, consolidates emotional memories, influence the processing of information, and recognize and respond to the emotions of others.

About the writer - ZOHAR MOR ADV

Academician, lawyer, lecturer and writer. B.A, in Statistics (Performance Research) and Political Science, LL.B in Law and Master of Laws LL.M with Honours. Worked in compliance, regulation and risk management for the past 16 years. Today assists in motivating employees to comply with the guidelines, organizational change process to implement regulation and increasing motivation with an emphasis on managing the stress effect, through lectures, workshops for organizations and personal training using an integrated method (NLP, EFT, CBT)



2. **The ventromedial prefrontal cortex**, a brain region which is involved in decision making and social cognition, and activated when individuals are faced with situations that involve conflicting information. The ventromedial prefrontal cortex (vmPFC) is a region of the brain that is thought to be important for empathy and social cognition.

Research has shown that activity in the vmPFC is increased when individuals observe or imagine others in distress, and that damage to this area can lead to deficits in empathy and social behavior. Additionally, studies have found that the vmPFC plays a critical role in the ability to make decisions that benefit others, even at a cost to oneself (ethical decision at the work place are known to be decisions that benefit other than the one who makes the decision).

Overall, the vmPFC is thought to be a key neural substrate for prosocial behavior and empathy. Clinical case studies demonstrate that patients with damage to the vmPFC have a reduced capacity to make decisions, minor as choosing a restaurant, or major decisions about monetary investments.

3. **Certain neurotransmitters** such as serotonin, dopamine, and oxytocin play a role in social behavior and decision making in the brain.

- Dopamine, has been linked to motivation and reward-related decision making. Dopamine levels increase in response to potential rewards and individuals with higher levels of dopamine in certain brain regions, tend to be more sensitive to rewards and more willing to take risks to obtain them.
- Serotonin has been linked to impulsive decision making and also it is thought to be involved in regulating mood and social behavior. Low levels of serotonin have been associated with impulsivity and aggression, while increasing serotonin levels through the use of selective serotonin reuptake inhibitors (SSRIs) can reduce impulsive behavior.
- Norepinephrine has been found to be involved in the brain's "fight or flight" response, which is triggered during times of stress. Norepinephrine is thought to help prepare the body for action, by increasing heart rate and blood pressure, and also is thought to play a role in decision making under uncertainty and ambiguity.

Overall, several neurotransmitters are thought to play a role in decision making, with different neurotransmitters involved in different aspects of decision making such as motivation, impulsivity, risk taking, and stress response.

4. **Neuroplasticity** also plays a role in the development of compliant decision making. Neuroplasticity, also known as brain plasticity, is the ability of the brain to change and adapt in response to new experiences, learning, and injury. It refers to the ability of the brain to reorganize and form new neural connections in response to changes in the environment.

Repeated exposure to pressure (social and/or authority), that can lead to changes in the brain and the formation of new neural connections that make it more likely for an individual to conform to the expectations of others.

In conclusion, neuroscience and compliant decision making are closely related fields of study that aim to understand how the brain functions and how it relates to behavior and decision making. Research in neuroscience has provided valuable insights into the neural mechanisms that underlie compliant decision making, and has the potential to inform the development of strategies to increase or reduce it.

For information about lectures and personal training in an integrated method (NLP, EFT, CBT) contact me.