

The extent to which free will and determinism relate to the cognitive perspective

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[Abstract]

For every decision making process free will and determinism is involved. In psychology and studies that focus on the cognitive perspective in psychology asks rather people make decision and act due to free will or determinism affected from the environment. Studies support both sides but studies have shown that cognitive perspective takes a soft deterministic approach, meaning that individuals are more or less free depending on informational input and situational context.

[Keywords] Cognitive approach, psychology, free will, determinism

[Introduction]

In cognitive perspective, it states that mind processing can be explained scientifically through experiments. Psychologists say that people's minds are like computers because we encode information and retrieve them and also like computers, we have limited space to store information.

People's mind are like computers because information is encoded, then stored and later recalled and used in the future. Atkinson-Shiffrin's Multi-Memory Model supports the assumption that mind processing can be explained scientifically through experiments. In multi-memory model, it explains the process if how information is received through senses which occurs in Sensory Memory Chamber, and when it is given attention it is stored in the short-term memory chamber. If the information in the short-term memory is rehearsed, it will be stored in the long-term memory. In the future, when the person wants to recall the information, the brain will retrieve the information that is stored inside.

In an article 'The Great Debate,' it explains determinism as the following:

"1 The Doctrine of Determinism

Determinism is a far-reaching term affecting many areas of concern, that most widely and radically states that all events in the world are the result of some previous event, or events. In this view, all of reality is already in a sense pre-determined or pre-existent and, therefore, nothing new can come into existence.

This closed view of the universe and of our world holds all events to be simply the effects of other prior effects. This has radical and far-reaching implications for morality, science, and religion. If general, radical, determinism is correct, then all events in the future are unalterable, as are all events in the past. A major consequence of this is that human freedom is simply an illusion.

2. Genetic Determinism

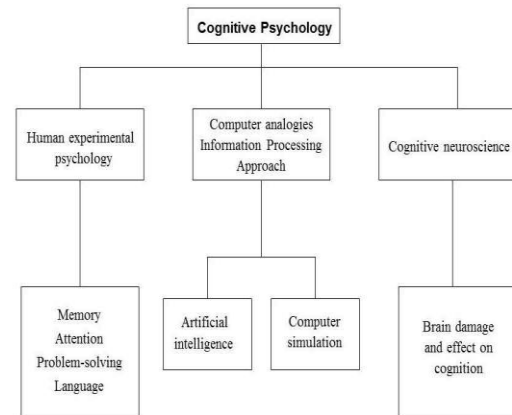
“One area of contemporary discourse in science that relates to the issue of human freedom is the notion of genetic determinism. Here, the concept of determinism is linked directly to the genes in the DNA of a person. Because we already know that aberrations in certain genes can lead to various forms of physical and mental disease in humans, we can say with some certainty that people are physically determined by their genes.

But genetic determinists want to extend this further, by claiming that even our behaviour is determined by our genes. In this line of thinking, we are but victims of our genetic makeup, and any effort to change our moral nature or behavioural patterns is useless. This is sometimes termed “puppet determinism,” meaning metaphorically that we dance on the strings of our genes.” (end excerpt)”

According to McLeod, “Cognitive psychology is the scientific study of the mind as an information processor. Cognitive psychologists try to build up cognitive models of the information processing that goes on inside people’s minds, including perception, attention, language, memory, thinking and consciousness.”

The cognitive approach can to a large extent be seen as mechanistic. Any mechanistic explanation is said to be deterministic because it suggests that a particular action will result in a predictable result. Cognitive psychology is divided in several areas but in its essence it focuses on different cognitive processes, many of which are automatic (e.g. schematic processing or other automatic processes such as Stroop effect). The view of the mind is that it can be compared to a machine (computer analogy) and that thinking takes place in sequential patterns, one step

causing the next (information process model).



[FIGURE 1] Simplified diagram of how cognitive psychology is divided and its main focuses

Nisbett & Wilson (1977) have even argued for the view that individual judgments and decisions leading to voluntary actions are non-conscious. They base their opinion on a series of experiment where participants failed to give a correct explanation for their behaviour. In one experiment, participants were given electric shocks and instructed to tolerate as much as they could before telling the experimenter to stop. Before the experiments, some participants had been given a placebo and been told that the pill would cause symptoms characteristic to an electric shock. Participants that had been given the placebo endured more electric shocks. However, those participants were not able to identify the placebo as the reason for pain endurance.

Wegner’s (1999) experiment gives further support to the view that our perception of a conscious will might be an illusion. In the experiment, participants played a game while listening to alternating music and spoken words through headphones, which the participant was told was played to provide distraction from the task. The participant moved a computer mouse

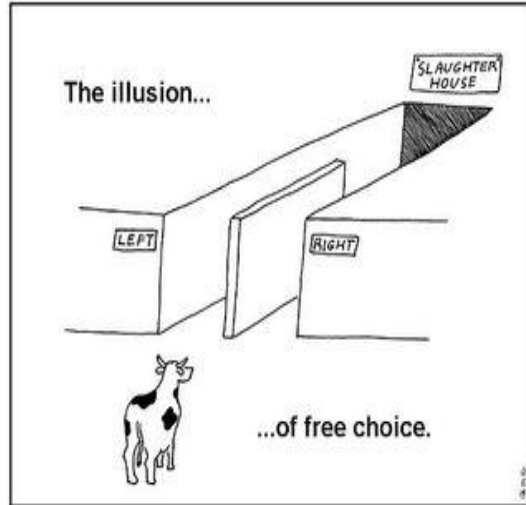
together with a partner. Next to them was a computer screen on which the pointer moved which displayed about 50 objects. The participant was told to move the mouse together with his partner and to stop moving about every 30 seconds when music was playing. The participant's opposite player was actually an accomplice who was told to stop the game by certain objects. Those objects were the same as the spoken words the participant just had listened to. The participants tended to believe that they intentionally had stopped the game if the spoken word they had just heard matched the object where the pointer stopped. Participants rated the stop as more intentional if they heard the word (e.g. swan) 1 to 5 seconds before they stopped on the same object. One conclusion that can be drawn from the study is that we might think that we acted intentionally if a preceding thought matches our behavior.

One might therefore ask if there is free will from a cognitive viewpoint. It can be argued that the above mentioned studies lack ecological validity and that some participants acted contrary to the general tendency. Most cognitive psychologists assume that mental processes actively organize and manipulate information that we receive. They claim that humans are not passive responders to their environment and that we actively can choose what we want to perceive, learn and remember. In addition, most cognitive psychologists assume that those mental processes guide our behaviour. This view has similarities with the common sense idea of free will that our actions follow from a conscious intention to act. The difference is that from a cognitive viewpoint action derives from partly conscious and partly unconscious cognitions. We might act freely, but not always consciously.

Many cognitive psychologists instead favour the middle approach that was labelled 'soft

determinism' by William James (1890). According to this position, actions can be more or less free depending on the situation. Free will is not freedom from causation but freedom from coercion and constraint. In those situations where actions are voluntary and in line with our desired goals they are free, but in those situations where our behaviour is constrained by the situation our actions are involuntary. For example, a child may apologise for swearing because he or she will be punished if there is no apology (highly constrained behaviour) or because the child is genuinely upset at causing offence (somewhat constrained behaviour). In both cases, behaviour is determined but more determined when behaviour is highly constrained by situational forces. Evidence consistent with the views of James was reported by Westcott (1982) in a study where Canadian students indicated how free they felt in various situations. They felt most free in situations involving an absence of responsibility or release from unpleasant stimulation (e.g. a nagging headache). In contrast, they felt least free in situations in which they had to recognise that there were limits on their behaviour (e.g. when they had to curtail their desires to fit their abilities). The view of soft determinism suggests that determinism is not an all-or – nothing situation, but must be related to the circumstances in which behaviour occurred.

With the studies conducted and experiments, free will also seems to be affected by determinism. People believe that they are might their own choices upon free will but eventually it is determined by the surround environment and at times, which ever direction is chosen, the final result will be the same.



[FIGURE 2] Picture showing an example of free will illusion

According to an article, we can distinguish determinism in two ways which can be tested and questioned to ourselves on our own. Firstly, If we could somehow rewind the world and replay it, exactly the same things would happen the second time around, or

Secondly, If we could exactly measure the entire state of the world and had the right

physics, then we could predict what will happen next.

[Conclusion]

The extent to which free will and determinism relate to the cognitive perspective has been studied. According to statements, it is believed that most psychologists within this perspective are soft determinists. Even though the cognitive perspective to a large extent can be seen as mechanistic and therefore is deterministic the freedom of actions depends on the constraint of a situation. Though our choices might not always be fully conscious, they can be considered to be free if they are in line with our desired goals. Problem solving and attentional mechanisms can be seen as the “choosers” of thought and behavior. These mechanisms operate from outside experiences and within certain rules and parameters, just as a computer cannot choose to do something it was not built or programmed for. Free will does however not necessarily mean freedom from inner causation, only freedom from external agencies. Hence, the cognitive perspective has made an important contribution but so far failed to end the everlasting controversy of free will and determinism.

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[Resources]

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