Understanding Memory Loss

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**Introduction**

For this part of the assignment, the movie that I have chosen is Christopher Nolan’s “Memento”. This movie was released in the year 2000 and is regarded as of the psychological genre movie. The main psychological disorder that has been represented in the movie is anterograde amnesia which was displayed by the movie’s main character, Leonard. Anterograde amnesia is a type of psychological disorder of memory in which the tentative memory cannot be created after an event which leads to amnesia. This leads to the inability, partial or full in recalling the previous occasions that have been elapsed in recent times. While the long-term recollections that is previous to the event causing amnesia remain intact. In the movie, Leonard, the main lead of the movie got the amnesia from the gun butted injury on his head by two criminals who were masked and came into his home. During the incident that led to amnesia, Leonhard wife, was raped and was almost murdered. This is the most recent memory that was transmitted into his brain’s long term memory.

**Discussion**

Throughout the film, he was unable to make new memories and it was found impossible for him to recall memory prior to every 20 seconds that is apart from his memories of long-term nature. Another thing that is important in the movie is that he takes pictures of events in order to remember what happened at that time. He wrote a note with the pictures, but later when he tried to use those pictures and notes, he clearly misinterprets the events.

Basically, the movie is based partially on the famous case of H.M. who was also affected by the anterograde amnesia and was studied by nearly 100 investigators. H.M. became amnesic in the year 1953(Corkin, 2002). Scoville and Milner wrote the first research paper on the H.M case in the Journal of Psychiatry, Neurosurgery, and Neurology. After the publication of the paper, it has since been cited around 1,750 times. This paper was published in 1957 and is on the same level as the paper published by Gage and colleagues' in the year 1998. The H.M. amnesia manifests as acquisition deficiency of semantic and episodic knowledge that is similar to the representation in the movie. While H.M. can understand the context of the joke and the talks, which is a contrasting feature with the movie. But later studies suggest that H.M can understand the context because of the lower extent of damage to lateral neocortex temporal. Christof Koch, who is a neuroscientist in Caltech, called the movie Memento to be the best and accurate memory system portrayal in the popular media. While Esther M. Sternberg, who is a physician and Director in the National Institute of Mental Health of Immune Integral Neural Program identified the film as close to the perfect portrayal of memory and neurobiology. He concludes that this movie keeps on influencing thought provocation in the viewer's mind, and every iteration makes people imagine about the notion that is preconceived in a different view.

One inaccuracy that is represented in the movie was the Sammy Jankis inability to evolve procedural memory. This concept is presented in the movie when the main lead of the movie was tried with electrified shapes so that to ask him repeatedly to pick up the particular electrified shape. This concept is an inaccurate demonstration of procedural memory because it is not stored in the damaged area of the brain (hippocampus) but is stored rather in the cerebellum, putamen, caudate nucleus, and motor cortex(Hilts, Hammett & Dick, 2004). Another inaccuracy in the film is the mislabeling of Leonard's condition as a short term memory loss and not particularly amnesia when the matter of fact is that it is amnesia.

**Conclusion**

Although the movie represents many of the amnesia features with accuracy, but still a deep understanding of the procedural memory was not clearly depicted in the movie which leads to many of the inaccuracies. If these inaccuracies were addressed in the movie, it would not only be a perfect reflection of the memory condition but would be a source of information for generations of neuropsychologists to come.

**References**

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