

SELB: OPTION #2 = EMO. & COG.

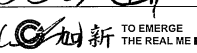
Emotions are made out of subjective experiences consisted of psychological charges and cognitive appraisal. Early theories of emotions have emphasized on the biological aspects while later theories have focused on the cognitive component of emotion. However, modern research have approach it as an interactive combination of both the biological and cognitive experiences. In Brown and Kulik's 1977 study on the theory of flashbulb memory, he suggests that FBM is vivid in detail, long lasting, and accurate due to its emotional relevance to the subject, the aspect of surprise, and the important consequences that come with the memory. Neisser, however, proposed that it is through rehearsal and accessing the memory from time to time that concrete memories are able to be maintained and stored into long term memory. LTM is processed through the amygdala which processes emotional and episodic memory. This is different from FBM because FBM focuses on longevity and photographic conclusiveness. The Theory: also proposed spinal neural mechanisms that simulates an emotional response to the shocking event as a makeup of FBM. The premise of FBM is that it's resistant to change, long-lasting and accurate due to the emotionally aroused experience during the moment and immediacy in an individual has to an event, which registered a permanent heightened residence in their memory.

In Brown and Kulik's 1977 theory on emotion's relationship to EBM, they invited 40 white participants and 40 African American participants to answer a questionnaire measuring the clarity of important historical event such as the assassination of JFK. Participants were asked to choose one out of 9 historical event that happened on a natural scale based on personal relevance to the event involving shock. As a result, white people recalled more memory related to white people while African Americans recalled more memory related to African Americans. This proves that race does play a factor in individuals' recall and consequently, surprise, and shock is significant in its distinctiveness and memory. Factors of shock and emotional relevance do cause people to hold a stronger memory of the event and is therefore determinants to formulate to EBM formula.

This phenomenon is proved again in Sharot's 9/11 study, where divided participants into two groups: downtown (DT) and midtown (MT). To signify their proximity when the 9/11 incident had happened. Sharot asked the participants to answer questionnaires regarding 9/11 and their summer vacation. As a result, the DT group answered the questionnaire more correctly since the World Trade Center is located downtown. While the MT group answered the questionnaire less accurately and even scored better with Sharot's regarding their summer vacation. This proves that location does have an impact on memory. The closer in proximity the subjects were to where the incident happened, the more emotionally aroused they felt about the incident. Therefore, the EBM was more strongly imprinted in the minds of of the DT group.

because they felt more emotionally aroused due to their proximity to the WTC, as compared to the LIT group.

However the findings of this study is inconsistent in the results of FBM need of a specialized neural mechanism that evokes emotional influence. The attack on WTC was also used as an opportunity experiment by Talar and Rubin in 2013. They a group of randomly sampled people to recall what happened 1, 7, 42, and 224 days after the attack and after a day to day event. Although they claimed their FBM contain vivid details, and treated them confidentially, they were just as inaccurate as recall for everyday memories. Proving that FBM is just as persistent and perpetual as regular memory, which for the most part involves. This study thus debunks the original FBM, because even an emotionally influential, surprising and highly consequential event changes over time.

Neisser and Harsch also questioned the existence of FBM in 1992. He believed that FBM is a product of repetitive maintenance and recall. He asked 106 students to fill in questionnaires describing their emotional and surrounding experiences hearing the Challenger disaster 24 hours prior to if they came back and took the questionnaire 2 years later in addition to question on their confidence of accuracy and whether or not they have taken the same quiz before. Although the assumed accuracy is 4.17, 22 of them scored less than 2 points. Also, their trial 21% 

reported that they were informed through TV increased to 45%. Therefore, the results challenge FBM. Although a subject is confident in their answer and was "traumatized" by an event, the accuracy of recollection memory can still decline. Memory deteriorates regardless of shock aspects. This challenges the notion that FBM is any different than normal memory. However, it is worth mentioning the this experiment had no control condition, so it is unfit for comparison between FBM & normal memory. If FBM is the flashbulb theory is wrong since erroneous memory occurs in recall. "Emotional relevance and consequences are important to FBM while surprise was not supported by empirical evidence. Researches to support or refute FBM show that memory can be unreliable because emotion affects recall and retrieval of event. Some weaknesses of the claims the the studies aimed to challenge FBM failed to distinctively show the immediacy between individual and event. The 2 studies show that FBM, despite its relative richness in detail and confidence in recall, doesn't hold permanent residence in memory nor is it any more accurate than normal memory.

An error in FBM is that it's essentially like reconstructive memory, flexible to changes with every recall. Memory is active and not passive, it's not merely a recitation of received information. Memory recall is influenced by external influences. Therefore, the FBM is similar to the eyewitness theory. In Christensen and Hubertel's 1993 study. He asked 110 witnesses on 22 bank robberies some questions. The victims had better recall and were even able to recall memory 15 mins later. This proves that fear is relevant to recall. The heightening or lowering of emotion can lead to inaccurate recall. While moderate stress

actually improves recall accuracy. The EWT states that memory recall is improved by heightened physiological reactions. EBM states that an incident's emotional impact is so strong that it imprints to LTM. Similarly EWT can explain this phenomena in that a person's arousal broadens their attention, leading them to be able to process more surrounding circumstances.

EBM accepted to explain vividness of memory, and emotional relevance and high important consequences. These factors are all plausible in the formation of EBM, as stated by Brown and Kulik. Also, emotionally triggered hormonal changes cause people to remember events for longer. However, skeptics of Brown and Kulik states that EBM is essentially reconstructive memory in that they both state that emotional relevance is equivalent to accuracy. Neisser proposes that memory is vivid because of internal and external retelling of events, such as retrieval and social sharing. The confidence in recalling EBM is not equivalent to accuracy. The recall of EBM is no more accurate than recall on an everyday event. EBM proposes that vividness and accuracy of memory are codependent. The errors in EBM thus makes us question the "lightbulb" in EBM. However, although EBM is challenged, it still provides a valid explanation to why impressions increases memory of events.

See A = Schema & cog.

Schema is the mental representation that organizes knowledge, beliefs, and expectation. It is used to predict and understand the world. Piaget states that schema is not the categorization of information.

research is limited, it can be concluded that flashbulb memories, like other memories lose accuracy over time. Through rehearsal and more importantly, the emotions tied to the memory, the actual timeline of events can be distorted by the human mind, which ultimately ~~is~~ ultimately emphasizing the intense connection between the emotional or biological response and the cognitive process.

SAQ-Option #2

~~As with all neurological and biological pathways~~
PI Organization and mental maps lay the foundation for the human brain and ultimately the cognitive process. Influenced by external and internal factors, cognitive schemas are formed in the brains of all individuals. Schemas as described by Piaget (1976) are mental maps that help guide the information from stimuli into different parts of the brain for processing. A more common name for this is a heuristic. Heuristics can be described as mental shortcuts used in the mind to alleviate the ~~immensity~~ of immense amount of information humans come into contact with. Coming back to Piaget, it has ~~strongest~~ been theorized that how the brain takes in or encodes information, as well as how it retrieves information is completely influenced by schemas (heuristics). Broken down into three ^{general} parts, Piaget identified three schemas. The social

Schemas, which takes information and formats or models it to fit societal beliefs and norms. The self schemas which connects to how an individual views themselves and thus internalizes information. And lastly sequential schemas, which determine importance and priority of information based on priority level.

P2 One study that looks in depth at the sequence schemas is Bransford and Johnson (1972). In this study 50 high school students were all asked to listen to a script. Each divided into 5 different groups, some were given context, others were not. Some were given a filler task and others not but ultimately they all had to retell ~~the~~ or recount the events of the script. The study showed that the group with context before listening to the script were able to better recall what ~~the~~ occurred in the script. ~~and so~~ what this suggests is that the order in which information is presented is key in allowing the mental schemas of sequence to work most effectively. Also, if given in a clear order as seen with this experiment, the load ~~on~~ the brain must carry in processing information with schemas, is eased.

P3 While it can be suggested that all schemas

one of equal importance, Darley and Gross (1983) ~~the~~ in their study suggested that the social schemas is most influential because it deals with raw external stimuli. If the schema of self (maybe even self efficacy) is low, then the ~~the~~ schemas in the brain ~~are~~ can be some far more influenced, even biased, by external factors. This is what suggests that the formation of schemas (heuristics) can ~~distort~~ be manipulated ~~by~~ to an extent where ~~all~~ information is internalized inaccurately. Thus with further studies, we can ~~be~~ researchers can better understand schemas and how to combat the influence of all the external information the brain is presented with.