

# FINAL QUIZ    ERQ Best Answers

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## **Section A**

**Answer all questions in this section.** Marks will be awarded for focused answers demonstrating accurate knowledge and understanding of research.

### **Biological approach to understanding behaviour**

1. Describe one evolutionary explanation of behaviour. [9]

### **Cognitive approach to understanding behaviour**

2. Outline one ethical consideration related to studies in the cognitive approach to understanding human behaviour. [9]

### **Sociocultural approach to understanding behaviour**

3. Explain how and why one research method is used to study cultural origins of behaviour and/or cognition.[9]

## **Section B**

**Answer one question in this section.** Marks will be awarded for demonstration of knowledge and understanding (which requires the use of relevant psychological research), evidence of critical thinking (for example, application, analysis, synthesis, evaluation), and organization of answers.

4. Discuss one or more ethical considerations related to research in the biological approach to understanding human behaviour.[22]

5. Discuss how emotion may affect one or more cognitive processes. [22]

6. Discuss one or more ways culture may influence behaviour and/or cognition. (22)

in language as a variable to prevent prevent any group from not understanding the instructions. Therefore, the study has high internal validity as other confounding variables are controlled.

ERQ #4

## ERQ #4

One ethical consideration related to research in biological approach to human behaviour is undue harm or stress. This essay will look into genetics and behaviour. Nature of the study can lead to stress in participants in the forms of psychological, physical and emotional distress. Protection from harm is a guideline researchers have to follow as its their responsibility to minimize the stress as much as possible. And this has to be done while conducting the experiment which is valid and valuable.

One study that raises the consideration of stress is Caspi et al., 2003. Participants included fourteen 26-year-olds. All were divided into three groups; one with two short alleles of 5-HTT gene, second with one long and one short allele and third with two long alleles of 5-HTT gene. Participants were asked to fill a stressful life event questionnaire. Results showed that people with two short alleles had higher rate of stress and experienced depression. Also, it was concluded that not simply having the gene was not enough for depression but also having a stressful life event, may it be financial, economical, relationship stressors. The study highlights the ethical consideration of undue harm or stress as participants had to recall life events which were stressful. But more importantly people were experienced self-fulfilling

prophecy as they would have the tendency to think about their results that would lead to experiencing the expectations. The self-fulfilling prophecy can further cause mental harm and eventually physical harm as a side effect of depression. Another way participants may feel stress is after the study, they might face stigmatization by others in the study who did not have major history of depression. Genetic susceptibility of stress being more in the case for people with 2 short alleles of SFTT1 gene would give the impression to participants themselves, that they are easily prone to stress in the future. Hence, having a greater disposition to stress and lower resilience would cause them to actually feel more stress.

Another study is the Weissman et al, 2005 that involved 161 participants from grandparents to children. This four generation study investigated through past interviews and clinical diagnosis of the children by child psychiatrists. The process of various interviews and findings chance of finding out who has more a history of depression more can give rise to stress. Hence, this study also faces the issue of self-fulfilling prophecy, especially by the children in the study. Results showed that children with parents and grandparents who have depression, have a high are prone or have already experienced psychological disorders.

Undue stress or harm can be minimized by other ethical considerations such as informed consent. Both studies had informed the participants before hand, threats of potential stress and the procedure itself. Researchers need to

make sure all participants are in the experiment willingly. Also, the right to withdraw is an imperative ethical consideration, as during the experiment, if participants do not continue further due to stressful conditions, they need to be informed before that they have the right. In Caspi et al., researchers were not trying to interfere with the participants. But they have to be present at all times since they have the responsibility to protect the participants. Both studies require the people to disclose personal information when interviewed or asked to fill the questionnaire. This process might not be okay with all participants, leading to emotional distress. Weissman et al. could take another approach by a prospective study, and not informative by testing them before. Lastly, researchers need to provide support and counselling to the participants during the process of experimentation. Individuals might not have to leave the study completely, but can have a constant support with them to get through it.

Discuss how emotion may affect one or more cog processes

Emotion and cognition have a bidirectional relationship which means that they both influence each other. Emotion can be defined as the complex reaction pattern involving experiential, behavioral, and psychological elements. On the other hand, cognition can be defined as the mental process of acquiring knowledge through experience, thoughts, and the senses. Cognition can affect emotion when there is cognitive appraisal to an external stimuli, resulting in an emotional reaction. Emotion can also affect cognition which is shown in the flashbulb memory theory. With that being said, past studies focused more on the determinants of flashbulb memory while current studies focus on the accuracy and perceptual accuracy of it as this advances the theory further.

Flashbulb memories are simply the vivid memory of the circumstances in which a person first learns about a surprising and emotionally arousing event. There are two mechanisms to the flashbulb memory theory which are called the mechanism of formation and the mechanism of maintenance. The mechanism of formation simply explains how flashbulb memories are formed. This mechanism states that there are two variables that need to be met in order for a flashbulb memory to form. The first variable is surprise which means that the event has to have at least a certain amount of surprise. The second variable is personal consequentiality which means that the event has to be have at least a certain amount of personal relevance and consequentiality. Only when ~~the~~ these two variables of surprise and personal consequentiality are met, will a flashbulb memory form. The second mechanism is, the mechanism of maintenance which explains how people solidify flashbulb "memories" inside their brain. This is done through overt rehearsal and covert rehearsal. Overt rehearsal is talking to other people about the memory, and covert rehearsal is replaying the memory inside

their brain. All in all, the mechanism of forming and maintaining explicit  
flashbulb memories work and is proven by a lot of  
studies.

One study that proves the flashbulb memory theory is Brown  
and Kulik (1977). The aim of this investigation was to test the  
determination in a flashbulb memory. They the researchers used 40 Caucasians  
and 40 African Americans as their participants. The participants were asked  
to fill fill out a questionnaire regarding 9 ~~potential~~ assassins or political  
figures and one ~~person~~ involving personal event. From the results, the researcher  
found that African Americans ~~had developed a~~ remembered the assassins  
of Black political figures such as Malcolm X more vividly in comparison to  
Caucasians. This allowed the researcher to conclude that ~~it~~ was due  
to the higher level of personal consequence. Furthermore, the researcher found  
that events that were more surprising to the participant positively correlated  
with their vividness of the memory. ~~Also,~~ The researchers also found that  
surprising events also positively correlated with the amount of overt rehearsal  
the participants did on the memory. Since flashbulb memory is  
characterized as being more vivid than normal memory it can be concluded from the results  
~~that a surprising event will result in the formation of flashbulb~~ this forms  
of a flashbulb  
memory theory  
memory. Moreover, the results also prove the model of maintenance because it  
shows how forming of flashbulb memory will result in overt rehearsal.  
This study clearly ~~proves~~ <sup>reiterates</sup> the claim became as food that the  
~~the element of surprise at least at personal consequence call the determinant~~  
~~of the flashbulb memory memory.~~ However, one critique of this study is  
the use of self-reporting. Self-reporting may lead to several characteristics  
or simply incorrect answers which will skew the data. Another critique  
is that this study is unable to measure more things, such  
as level of surprise. Moving on, the study is a good study that  
shows how emotions such as surprise and will affect cognitive  
process such as memory. Brown and Kulik (1977) is a good

It has been proven in experiments over and over again

study that shows how past events form on the determination of flashbulb memory.

The are several critiques and complimentaries that can be made about the flashbulb memory theory. One good thing is that it has high predictability ~~this is~~ in real life. This is because ~~everybody~~ in life goes through shocking events, so you will form flashbulb memory. Furthermore, this study theory also has good population validity because studies on flashbulb memory are a wide range of participants. Another good thing is that this theory is highly applicable in everybody goes through shocking events and will form flashbulb memory. On the other hand, there are several problem above the flashbulb memory theory that needs to be pointed out. One critique is that the level of personal consequently can not be mainly measured as there is no way to do this. This is the case for level of surprise, amount of rehearsal, and accuracy of memory. At this may then the evidence mostly comes from self reporting which may be problematic. Another critique is the researcher at the time of the 9/11 and Kultsch study did not know how to even flashbulb memory exactly here, but current studies have actually find the answer to this.

One study that compares the accuracy of the flashbulb memory is Talarico and Rubin (2003). The aim of this study was to determine the accuracy of flashbulb memory compared to normal memory. The participants consisted of 54 students. The participants were to report on 9/11 and an everyday event that they may recall one day after 9/11 occurred. Then, they were asked to describe the memory, emotional response to the memory, vividness of memory, and perceived accuracy of it 1, 6, or 12 weeks after 9/11. The researchers found that there was no difference in the ~~the~~ accuracy of the flashbulb memory to 9/11 and the normal memory of the everyday

event. However, there was a difference in the participant's perception of accuracy of the event. The participants believed they were more accurate about the flashback memory in comparison to the visual one. From this, the researchers concluded that people did more accurately have more accurate memories regarding flashback memory, but had only had a higher percent accuracy. This experience clearly proves the idea as it found that there is no difference in accuracy of the Flashback memory and visual one. One critique on this study is that researcher <sup>can</sup> ~~would~~ <sup>certain</sup> be ~~sure~~ <sup>sure</sup> that on flashback memory we found for 9/11 as they can now remember things such as kind of surprise. Moreover, the study uses self-reporting which may result in demand characteristics or inaccurate answers, skewing the result. Although there are many critiques on this study, Talarico and Rubin show how emotions such as ~~surprise~~ <sup>the</sup> feeling of surprise can affect the cognitive process of memory by increasing people's perceived accuracy. This study also shows how emotional events focus our attention on the accuracy of flashback memory.

To wrap it up, flashback memory are the visual memory in which a person finds hearing it or ~~surprise~~ <sup>surprised</sup> and possibly consequent event. This past studies on it found out on the determinants of it which can be seen in Brown and Kulich (1997). On the other hand, current study ~~found~~ <sup>such as</sup> ~~as~~ <sup>as</sup> on Talarico and Rubin (2003) focus more on the accuracy of it. With that being said, one similarity they share these studies is that it shows how emotions will affect the cognitive process of memory.

obtained. Cultures were compared and contrasted based on the relationship between the (independent variable) nature of their culture as individualist/collectivist and how that manifested in their (dependent variable) level of societal conformity. Thus, this study highlights the effectiveness of quasi experiments in cultural origins and behaviors as it provides relevant and accurate understanding of psychological interactions all over the world.

### ERQ #6: ERQ #6

Culture can be defined as "a set of attitudes or beliefs that connects a group of individuals" Matsumoto (2007). Numerous studies have been conducted regarding this subject and how it has evolved over decades and even centuries. It has been theorized that cultural transmission, the passing down of culture from generation to generation, has been largely made possible through cognitive and behavioral venues. While some studies have suggested that culture only really impacts general behavior and rarely influences cognition, other more in depth studies suggest cognition is a key factor in ~~exam~~ understanding and internalizing cultural behavior. What this means, is that behavior and cognition are interconnected under the influence of culture.

One of the longest standing theories that aims

to define culture is Hofstede's Cultural Dimensions.  
This study began in the <sup>1970s</sup> ~~1980s~~ and is still being edited and re-evaluated today as a longitudinal study on data collection. Hofstede theorized that there were two different sides in the spectrum of culture (between Eastern and Western societies) and upon this basis he established his "dimensions of culture". These consist of individualism v collectivism, power distance index, masculinity v femininity, and long-term v short-term, all of which define different cultural aspects. The most prominent and widely investigated is individualism v collectivism. This dimension explores how an individual fits into a culture and whether their identity is based on self or on the whole. It can be easily investigated and compared across cultures.

which determine how a culture acts as a whole and in individual

One example of this can be found in Finkelstein (2010) a study that focused on how culture affects volunteer behavior and motives. The study involved 194 undergraduate students at a US university. <sup>who participated for extra credit.</sup> Questionnaires were distributed to determine motivations for volunteer and service work among the individuals. Results stated that volunteer behavior was influenced differently based upon identified culture. Individualist culture participants stated their motives were for personal accolades and promotion in work or career positions. Collectivist culture participants stated their motivation in volunteering came from social pressure and acceptance as well as social gratification. Based upon

5/11

Hofstede's theory, it can be noted that volunteerism is common on both sides of the cultural spectrum, although they are influenced and motivated for different reasons based on culture. This highlights that the active decision to volunteer is based upon the cognitive process <sup>in relation to the stimuli</sup> and approach for individuals across a variety of cultures. Moreover, behavior is examined by understanding the influence of cultural dimensions upon an individual and then how that is internalized and exhibited in behavior.

This idea was theorized by Bandura (1986) in what is called Social Cognitive Theory. This theory suggests a tri-directional relationship between ~~an~~ which examines culture more broadly than Hofstede's environment. Bandura suggested that social categories were first demonstrated to the individual, then internalized and replicated on a basis of agency and higher self-efficacy; this meaning an individual's cognition was ~~of~~ a cognitive process acts as a mediator between stimuli (or the environment) and behavior. This can be applied to culture as behaviors that are generally consistent across cultures have been transmitted down through generations via a social learning platform. Furthermore this suggests that behavior and cognition are interconnected and relate to one another in establishing an overall identity as a culture.

Chiu (1972) is a study that thoroughly examines this relationship. On the whole, this study aimed to also explore the difference in cognitive process between individualist (USA) and collectivist (Chinese) cultures. Participants consisted of 221 Chinese and 316 American students of similar socioeconomic and rural background. Cognitive tests were administered where 3 pictures were presented, for example: a chicken, a cow and grass. Participants were asked to "match" two<sup>2</sup> of the pictures and leave one out. With this particular set, American students typically chose cow and chicken as apart while Chinese students chose cow and grass. These choices determine that individualist societies are more analytical and categorical in cognitive process, as the cow and chicken are both animals. The Chinese collectivist culture on the other contrary is defined by a contextual and inter-connected cognitive process as the cow eats the grass, the chicken is the odd one out. Thus, the cognitive process and ultimate approach is widely influenced by culture which in turn is reflected by the behavior of the individuals. While this study does provide strong evidence summarizing culture and behavior/cognition, it must also be considered that the control of socioeconomic approach also provides a basis for similar cognitive process. It could be determined that while culture may be the main influence on cognition, other societal factors come into play as well.

To conclude, cultural studies do examine social behaviors and cognitive processes ~~through~~ and the connection between them. It can be largely determined that this overall behavior is the end result of cultural transmission and cognitive approach which ultimately defines the multitude of cultures and societies ~~out~~ throughout the world.