

Assignment # 2

Anxiety and Decision Making

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The purpose of this assignment is to analyze, from a biopsychological perspective, the roles of various brain structures in our emotional experiences. You will be asked to write a report of no more than 1000 words that integrates material from your textbook, articles from the popular media, and short video clips. In your report, you will analyze an important problem that affects a large number of people, many of whom do not seek treatment....Generalized Anxiety Disorder. This assignment is meant for you to continue to apply the skills learned in Assignment 1, taking into consideration the feedback received in your first assignment. This time, however, you will work on your assignment individually (not in groups), and your report will be in essay format.

The Problem Under Investigation:

Melissa often feels quite anxious and worried. In fact, many things seem to worry her, for example, whether her children got to school safely, whether she made mistakes at work, whether she will be able to pay all her bills, whether she hurt her friends' feelings....and the list goes on. In fact, she spends so much time worrying that she finds it very difficult to make any kind of decision....big or small....she is just worried that she will make the wrong decision....and then what???? As a neuropsychologist, your goal is to understand how anxiety might influence decision-making from a neurobiological standpoint. What bodily mechanisms might make it so hard for people like Melissa to make even the smallest of decisions?

In order to accomplish this task, you will begin by reading the following sources:

- Modules 3.2, 11.1 and 11.2 of your textbook (also refer to your class notes)
- The article entitled "How Does Anxiety Short Circuit the Decision-Making Process" (Bergland, 2016)
- The article entitled "Reduced brain connection seen in people with Generalized Anxiety Disorder" (2012)
- View the following video <https://binged.it/2PBvttx> (The Amygdala-Prefrontal Cortex Connection is crucial"
- View the following video <https://www.youtube.com/watch?v=Loleha5EbEo> (connection between amygdala and frontal lobe – Abigail Baird)

Using evidence from the above sources, you will write a report of no more than 1000 words geared to other clinical neuropsychologists who have been eager to learn about your work, as

your work may help to devise new treatments for Generalized Anxiety Disorder. Your report must address the questions below.

The following questions represent the sections of your report. Thus, make sure to provide a subtitle prior to each section. The subtitle should consist of no more than 3-4 words that represent the content that is being discussed in that particular section.

Discussion Questions:

1. Using evidence from modules 3.2 and 11.1 of your textbook as well as the article by Bergland (2016), explain the role of the Prefrontal Cortex and its various parts in decision making.
2. Referring to module 11.2, explain the role of the amygdala in relation to fear and anxiety. Show how the amygdala controls the stress response.
3. Using evidence from your textbook, the article entitled "Reduced brain connection seen in people with Generalized anxiety disorder" (2012), and the 2 short videos, explain the role of the prefrontal cortex in controlling the activity of the amygdala in stressful situation.
4. Explain how the mechanism discussed in question 3 might be faulty in people, like Melissa, who are highly anxious.
5. Citing evidence from the article by Bergland (2016), show how increased anxiety affects decision making and why these effects occur.
6. Conclusion: Using all the evidence gathered from the sources listed above, explain the biological mechanism (i.e. the roles of the PFC, uncinated fasciculus, and amygdala and their interaction) by which anxiety may influence decision making in this way. Show how this mechanism may account for Melissa's problems with decision making.