

## **Jamie Lee\_Exam 2**

### **A Failure of Happiness**

#### **(9) How do emotions influence the way in which people process information and/or form decisions?**

In the past, emotions helped us survive. It helped us assess our situations and act quickly and correctly in order to preserve our lives. However, we no longer live in a society where our livelihoods are being threatened, and the decisions that we have to make are much more complex. One has to take into account many different factors, such as their personal emotions, other people's emotions, the impact of their decision... the list goes on and on. When making these more complex, cognitive-emotional decisions, two systems are usually at work: The emotions (core) system and the higher-level (control) system. This is known as Levenson's Core and Control System Theory. The emotional system is highly reactive and gives us quick and automatic systems. This was the system that helped us survive and are good for situations that require that kind of quick "thinking" but aren't so good at general tasks that require behavior that is consistent across time and can support a broader range of goals. The control system is a more newly evolved system that can help with taking in multiple different factors and stimuli and make highly thought-out and complex decisions.

These two systems are always at odds with each other and it is the balance between the two that affect the decisions that one makes. Finding and maintaining this balance proves to be quite difficult, as emotions are hard to ignore and are often times the sole thing that we take into the account when making these decisions.

This is called the "Affect-as-Information" Hypothesis, and it states that affect (emotion) often serves as the basis, or information, when making decisions. When evaluating an object of a situation, the feelings we feel from whatever we are appraising become the "objective" information. This can be seen in real life instances: when jurors are induced to feel more distress about a defendant's transgressions, they tend to evaluate the defendant to be more guilty. This induced distress hones in on certain details and specifics and hangs onto that, and influences the decision. This is called local focus. It is seen in highly anxious, and the opposite is seen in people with low anxiety. A person in this low anxiety state will adopt a more global focus, evaluating objects, people and stimuli with all possible information and thus making more "rational" decisions.

In the Failure of Happiness vignette, we watch a promising graduate student fall into addiction and a series of unfortunate events. When he was (seemingly) happy, he was able to engage in large scale philosophical discussions, communicate effectively with various people and collaborate with the narrator.

We see that as time passes and he has fallen to his addiction, his behavior has become one of somebody who couldn't see the big picture. He is no longer able to focus on the larger things in life; often unable to return calls, maintain relationships and keep track of things outside of the "now".

The induction of this highly anxious and "on edge" state was due to drugs. Drugs are substances with extremely high approach positive affect - they produce visceral reactions and directly interact with the body's dopamine production. With high approach positive affect (aka drugs, in this instance), we see that global attention decreases. Drugs also provide high levels of immediate gratification. As humans, our brains desire whatever provides the highest amount of dopamine, and this behavior will continue to prime our brain to seek out similar inductions of feeling. Between the desire for immediate gratification and a delayed reward, giving into the immediate reward lets the emotional system win over the more rational system, which resulted in and further promotes the student's irrational decisions.

## **(11) Working memory capacity and emotion regulation: How does WMC influence one's ability to control their emotions?**

There are three subsystems (or storage methods) involved in working memory which are the phonological loop, the visuospatial sketchpad and the episodic buffer. The phonological loop is involved in holding verbal and auditory information and tends to be quite limited. The visuospatial sketchpad, like its name, holds visual and spatial information and is also quite limited. The episodic buffer links the two above with long term memory and the central executive.

The central executive is another system that allows for flexible and controlled processing of information. It constantly updates and replaces old information with new, relevant information; allocates one's attention to a task or goal; and inhibits any dominating or automatic responses that might interfere with the present task of goal.

This is extremely important in self-preservation and emotional control. It keeps a person focused on their goals and also provide an accurate representation of goals and goal-relevant information. By keeping this kind of information in a person's working memory, it motivates one to keep the central executive as the chief and to keep their efforts to be more rational. And when in this state, one is constantly monitoring oneself. They are monitoring their current situation and context, how they are feeling and what they are doing. And if there are any discrepancies between the current state and the goal state, those discrepancies would be identified and resolved. One can modify their behavior or alter their goals once these are identified and intelligent self-regulation (high amounts of working memory capacity) involves flexibly adjusting plans when confronted with obstacles.

The student, when taking drugs, was unable to keep their goals in their working memory. He was seen to be extremely motivated and promising, someone who was able to take everything that they did and apply it to their goals. He had maintained his focus on his goal, which motivated him to keep his emotions and desires in check. This is called top-down processing: look at the goal and keep yourself on the right track. However, he fell into using drugs and being a more impulsive person. He is unable to monitor himself, see where he is in life in relation to his former self and goals, and was unable to adjust plans when confronted with his obstacles. He fell victim to desires and impulsive thoughts, which is called bottom-up processes. Emotions, desires and urges that involve automatic and prepotent responses give very strong signals and influence the goals. The student had lost his goal in life.

## **Surprise Stimulus**

### **(4) Why/How are emotions important and/or functional (intrapersonal, dyadic, in a group)?**

Emotions serve very important communicative functions in several different sizes, within yourself, with one other person and in group and community settings. Usually the function of emotion in most of these settings is to help with anticipating behavior and understand why one does the behavior that they do. And this appears to be innate! I answered this very same question in my midterm and stated that the baby (in the midterm surprise stimulus) was not yet old enough to quantify and identify emotion, yet was able to feel the amount of emotion coming from the mother's singing.

When listening to the Story Corps surprise stimulus, it was quite heartwarming to listen to the son finding himself following in his father's footsteps. He said that he never really wanted to, and that dj-ing was just something that his father did, but one day he just picked it up. The father was also probably not consciously pushing this onto his son or wanted him to (maybe he did? I wouldn't know), but just the very existence of the father's favorite pastime being around the son influenced him to follow in his footsteps. Again, an innate desire to follow suit and

bounce off of what a young child sees. The influence of parents in their childrens' lives cannot be ignored. To answer the rest of the function of emotion in different groups beyond a dyad (two people), emotions can also be used to communicate dominance. It lets one person know that they have the superior ground to the other, or convey no dominance at all! It is entirely possible to use emotions to convey the fact that everybody is on the same page.

Another way that emotions can be useful are in group settings. In the readings and in our class discussions, we established that in group settings, emotion can be used to clearly define a hierarchy. There are leaders and then there are followers, and emotions can be used to keep both in check. However, in the Story Corps surprise stimulus, the emotions served a very different function. During the pandemic, due to minimal interaction and communication between people, and thus less utilization of emotion, people were having a hard time. The father and son, wanting to help the community, started doing sets every week. And as every week went on, the amount of people showing up kept increasing. The positive emotions that the two were able to share was spread throughout the community and helped bring everybody together. This is an example of how positive emotions in a group can function as a high motivator - further increasing the bond within the group.

## **(7) How do people communicate emotions? Relatedly, how are emotions in others measured (behaviorally, autonomically, neutrally, via self report)?**

Emotions are extremely important in communicating and maintaining relationships. Again, they serve several different functions intrapersonally, between two people and in groups. These emotions are usually communicated in three different ways: verbally, facial expression and bodily cues. These three are what other people are able to see and respond to.

Appraisals and interpretations of what somebody is feeling tends to be quite subjective and can be highly unreliable, but there have been many different methods devised to measure emotions, known as affect research. Affect research typically involve inducing emotions in as-close-to-real-life-situations-as-possible, reading highly emotionally coded statements, inducing certain facial expressions and using imagery or stimuli to induce emotions. The most widely used scales are typically self-report, as nobody can know one's emotions better than their own self. These are usually measured in different variations of scales, which can include adjectives, choosing between a bilateral scale, or choosing between faces that best represent how one is feeling. And those are good in clinical settings or obtaining more quantifiable and "objective" data.

However, in real life settings it is very different. Really the only things we can communicate and convey, and understand emotions is through our own appraisals of facial expressions, bodily cues and actions (as well as words! But words are too easy). In the Story Corps surprise stimulus, we see that the father and son describe their community as being extremely down and depressed - nobody was outside or being able to communicate with others. However, with their weekly community sets and allowing music (which is an extremely valuable way to bring people together, music is often called the universal language!) to bring the community together that people started displaying more actions of happiness. They were being social and communicative, talking to each other, saying hi, dancing in the streets - I would say these are pretty solid indicators of positive emotions in a behavioral way!

With the clinical affect research, we focus on the details, the minute and highly volatile physiological indicators of emotion, but in real life, these displays tend to be more obvious. We want to communicate with others, especially happiness and even more so in the setting of the pandemic in the Story Corps surprise stimulus.