

Lesson 5 Science of Love (716 words)

- (1) 文中の(1)~(3)に入れるのに最も適当なものを、それぞれ下の①~④から選びなさい。
- (2) 単語①~⑥の意味を、辞書を使わず類推して書きなさい。
- (3) (a)、(b)と同じパターンで使えるものを選択肢から選びなさい。
- (4) 本文中の「あ dopamine」と「い oxytocin」とは一体何か説明しなさい。
- (5) 下線部(c)に対する答えを書きなさい。

Garcia: Why do people fall in love? And when they do, how do people choose the people they love? What do you think brings us that strange feeling of love? We'd like to think about this issue from three different viewpoints. Each theory explains the cause of those complicated feelings of love. Andy, Megumi, and Beth will introduce theories that are from the fields of psychiatry, genetics, and biology. Andy, would you start?

Andy: Sure. I'll introduce the theory of Thomas Lewis, an American psychiatrist. He argues that people fall in love because of their childhood experiences. According to his theory, what matters most is physical closeness (a) as a child, such as being held in a mother's arms. Our brain remembers how comfortable that was. (b) As we get older, we seek the same sort of experience without being aware that we are doing this.

When we are attracted to somebody, it could be because he or she reminds us of good childhood memories. In a sense, we love someone not because we hope to be with the person in the future, but because we hope to go back to the past and enjoy ①comfort and affection again. Thus, the person becomes "the only one" if he or she actually has a certain look or smell that brings back very deep memories to us.

Garcia: That's an interesting theory. From a psychiatrist's point of view, (1).

- ①we love someone who looks like our parents
- ②we try to forget the experience in the past by loving someone
- ③we love someone because our hidden memories are activated
- ④we fall in love when we find someone who gives us affection

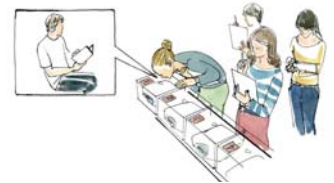
Megumi, could you introduce another theory?

Megumi: Well, I'd like to give an explanation from genetics. According to this theory, we are attracted to people who have different types of genes from our own. This is because the immune system gets stronger if different types of genes are combined. Therefore, a woman is more likely to have a healthier baby by choosing a man whose genes are different from hers.

OK. Now let me introduce one ②study that supports this theory. Claus Wedekind, a Swiss researcher, carried out a study called “Sweaty T-Shirt.” He conducted the ③experiment with 49 women. In the experiment, women smelled T-shirts previously worn by 44 unknown men for two days. Those women were then asked to indicate which T-shirts they were most attracted to. As you can see in the ④figure, the upper bar is about 1.5 times longer than the lower bar. That shows the women were more likely to choose the smell of T-shirts worn by men who were most genetically different from themselves.

Garcia: What an interesting experiment! What Megumi is saying is that according to this theory, (2).

- ①the same kind of smell as ours is the key
- ②genes determine our preferences in choosing a partner
- ③genetically, we can love only person at one time
- ④we are likely to find a partner by their smell



Thank you, Megumi. Now, let's listen to what Beth has to offer.

Beth: OK. I'll introduce a theory from biology. Helen Fisher, an American researcher, says that chemicals in the body may cause love. She compared parts of the brain of people in love with those of people not in love. She found that a lot more ①dopamine was ⑤released in the brains of people in love. Dopamine is a chemical which is produced when we do something exciting or enjoyable. It plays a key role in controlling people's moods and body movements. From this result, Helen came to the conclusion that we are literally “on a high” when we are in the initial stage of falling in love.

Let me now talk a little bit about the next stage. After the first stage of passion, the levels of dopamine eventually decline over time. In the next stage, a chemical called oxytocin plays an important role. Oxytocin is produced when we feel a connection with others, like kissing someone or hugging children. When ②oxytocin is produced frequently, couples feel closer to each other and their relationship can ⑥last longer.

Garcia: In short, Beth is saying, (3).

- ①chemicals make people fall in love, and make love last for a long time
- ②when people are “on a high”, it will be easier to find a partner
- ③there are two stages that people fall in love
- ④chemicals enable us to control our feeling

Now, we have heard theories from three different research fields that provide different viewpoints on love. (c) Which theory do you think best explains why we fall in love? One thing we know for sure is that, like the title of the famous song says, we “can't help falling in love.”