

## Article: *Handwashing and Motivation*

### Pre-reading exercises

Before you read the article, look at the box below. In the box, Readers A and B wrote reflections telling how they felt about the article. Read their reflections. Then do Exercise 1 under the box.

#### Two readers' reflections (feelings) about this article.

**Reader A:** *There is some information in this article that I could apply to my life. I am president of our club. To motivate members to come to meetings, I often think about threatening them if they don't attend. Maybe I should think of something positive....*

**Reader B:** *This article reminded me of my tennis coach. If we worked hard during a practice, after we finished, he gave each of us a jelly bean (a small piece of candy). ...*

**Exercise 1 Pre-reading:** Read the reflections of Readers A and B and answer questions below.

1. What reflection type did Reader A use?
  - a) She told how the article is connected to her life.
  - b) She explained what the article reminded her of.
  - c) She explained what she would like to know more about.
  
2. What reflection type did Reader B use?
  - a) She told how the article is connected to her life.
  - b) She explained what the article reminded her of.
  - c) She explained what she would like to know more about.

**Exercise 2 Pre-reading:** While you are reading the article, think about your reactions to (feelings about) the information. At the end of this study guide, you will write a reflection. In your reaction, your first sentence can be one of these:

- *I found some interesting/important information in this article.*
- *After reading this, I now would like to (learn more about /read more research about /...)*
- *There is some information in this article that I could apply to my life.*
- *I agree / disagree with the author about something.*
- *This article reminded me of (me/ my family/my friend).*
- *I was surprised by something in this article.*

**Exercise 3: Quick reading.** Read ONLY

- (1) the first paragraph,
- (2) the first sentence of each paragraph
- (3) the last paragraph

## Handwashing and Motivation

<sup>1</sup> This is scary. About 62% of restaurant workers do not wash their hands after using the restroom. Perhaps as a result of this, every year, 60,000 people who ate in restaurants had to go to the hospital with a disease that they picked up there.

<sup>2</sup> We expect doctors and nurses to be aware of how important it is to wash their hands after they have examined or helped a patient. They understand that if they don't, they could spread a disease from one patient to another. Surprisingly though, a researcher found that only 39% of hospital workers washed their hands properly. That is almost the same as the 38% of restaurant workers who do.

<sup>3</sup> Researchers wanted to find a way to encourage more handwashing. From the results of their studies, which are discussed in Tali Sharot's book, *The Influential Mind*, we can learn more about whether a carrot (something positive) or stick (something negative) is more effective in motivating people.

<sup>4</sup> To understand the concept of "carrot or stick," imagine that two mothers are trying to get their sons to do their homework to prepare for their next test. Danny's mother tells him that if he passes the test, she will let him go to a concert the next weekend. Ted's mother, on the other hand, tells him that if he fails the test, he will have to stay at home during the next weekend and won't be allowed to use his Smartphone.

<sup>5</sup> This is an example of using a carrot or stick to motivate someone. Danny's

mother offered him a reward (a carrot) to motivate him to study, but Ted's mother uses a stick by telling him that he will lose something if he doesn't study.

<sup>6</sup> To get hospital workers to wash their hands, researchers first tried a kind of stick approach. In every room with a patient, there was a sink and some soap along with signs reminding the employees to wash their hands. The researchers installed 21 video cameras above the sinks and focused these cameras on the sinks.

<sup>7</sup> Every time a doctor or nurse or other medical worker entered a patient's room, a doorway motion-sensor sent a signal to a research assistant in India via the web. These assistants watched the recordings to see if the worker washed their hands before working with the patient. The medical staff knew that someone was watching to see if they did this. Signs warned them that something negative could happen if they didn't wash their hands: they could spread disease. This was a "stick" approach.

<sup>8</sup> Surprisingly, only about 10% of these hospital staff washed their hands after entering a patient's room even though they knew someone was monitoring them via the video camera.

<sup>9</sup> The researchers then tried a different approach that involved a kind of reward. They put an electronic message board above the door in every room. Every time a medical staff member washed their hands, a positive message, such as "You are doing great!" would come

up on the message board. Also, it showed what percent of staff members during that shift washed their hands and what percent during the week had. Thus, if a staff member washed his/her hands, the number on the board went up.

<sup>10</sup> The results were amazing. Almost 90% of the staff members washed their hands. In other words, it improved from 10% before the message board to 90% with it.

<sup>11</sup> In sum, the researchers found that using a positive approach with the

electronic board was much more effective than the negative signs about spreading disease. Every time the staff members washed their hands, they received immediate *positive* feedback. This positive feedback triggered a pleasure signal in their brains which they enjoyed getting. In other words, they tended to repeat this action in order to experience that pleasure signal. After a while, it became a habit, and they continued to do it even after the electronic boards were removed.

**Exercise 4:** Answer these questions after doing a quick reading.

1. Answer True (T) or False (F).

- 1) This article is mostly about how to motivate students to study more.
- 2) Researchers wanted to encourage hospital workers to wash their hands more.
- 3) The researchers used the internet during the study.
- 4) The researchers counted how many staff members washed their hands after using the restroom.
- 5) Something positive was more effective than something negative.

**Exercise 5:** Read the article.

**Exercise 6:** Answer the study guide questions below.

1. Why did the author say, “This is scary” in ¶ 1?
  - a) 60,000 people ate in a restaurant.
  - b) Most restaurant workers carry a disease.
  - c) Most restaurant workers don’t wash their hands when they are supposed to.
2. What did the author think was surprising in ¶ 2?
  - a) The percent of medical workers who didn’t wash their hands was high.
  - b) Most hospital workers don’t know that they could spread diseases.
  - c) Some hospital workers have a disease.
3. If the underlined words are a mistake, write the correction above them. If they are not a mistake, write “OK” above them. (Notice: these are not grammar mistakes.)

*OK*                                   *hands*  
Researchers wanted to learn how to get <sup>1</sup> people to wash their <sup>2</sup> carrots. A <sup>3</sup> positive reward is like a <sup>4</sup> stick and a <sup>5</sup> negative threat is like a <sup>6</sup> carrot. Some assistants <sup>7</sup> in the patients’ rooms watched the doctors and nurses. The medical staff <sup>8</sup> did not know that someone was watching them. There was a sign that reminded them that something <sup>9</sup> bad could happen if they didn’t wash. This is <sup>10</sup> negative warning is considered a <sup>11</sup> carrot approach. Because of this warning, <sup>12</sup> most staff members washed their hands.

4. What was the “carrot” in ¶ 9?

5. What does “shift” mean in ¶ 9?

- a) It means to move from one patient’s room to the next.

b) It means the time period that someone works, for example, 8:00-5:00.  
c) It means the message board showed the percent.

6. About ¶ 10, write True (T) or False (F) for each of these.

- 1) The percent of handwashing went up because of the message board.
- 2) The messages on the message board are positive rewards.
- 3) The negative sign about spreading disease was more effective than the message board in getting workers to wash their hands.
- 4) When the researchers removed the message boards, the medical staff stopped washing their hands.

7. **Challenging Question.** You don't have to answer it if it's too difficult for you.

- In ¶ 11, it mentions "this positive feedback." What was the positive feedback in their study?

8. Why are positive rewards effective?

- a) Because they cause our brains to get a good feeling which we like.
- b) Because they can share them with other people.
- c) Because we are not aware that they are happening.

**Exercise 7.** Write a reflection about the article. Try to write a paragraph with several sentences. In your reaction, your first sentence can be one of these:

- *I found some interesting/important information in this article.*
- *After reading this, I now would like to (learn more about /read more research about /...)*
- *There is some information in this article that I could apply to my life.*
- *I agree / disagree with the author about something.*
- *This article reminded me of (me/ my family/my friend).*
- *I was surprised by something in this article.*

**Exercise 8. Academic Vocabulary Definition Exercise** Look in the article and find the words that have these meanings.

Word	¶	Find the word that means . . .
1.	look at paragraph 2	realize or know something that is true
2.	3	encouraging people to do something
3.	6	method of doing something
4.	8	carefully watching someone or checking a situation in order to see how it changes during some time

**Exercise 9. Vocabulary Fill-in Exercise:** Choose the words in Exercise 5 to fill in the blanks below.

1. A good \_\_\_\_\_ to studying is to turn off your Smartphone first.
2. If you think someone has stolen your credit card, you should \_\_\_\_\_ your credit card statement often.
3. A good coach always compliments us after a game. That's very \_\_\_\_\_ for us to do well.
4. I'm very unhappy with the car that I just bought. I wasn't \_\_\_\_\_ of the fact that it had a lot of mechanical problems.

**KEY****Article: Handwashing and Motivation**

**Exercise 1 Pre-reading:** Read the reflections of Readers A and B and answer questions below.

1.  She told how the article is connected to her life.
2.  She explained what the article reminded her of.

**Exercise 4:** Answer these questions after doing a quick reading.

1. Answer True (T) or False (F).

\_F\_ 1)

\_T\_ 2).

\_T\_ 3)

\_F\_ 4)

\_T\_ 5)

**Part 1**

**Exercise 6:** Answer the study guide questions below.

1.  Most restaurant workers don't wash their hands when they are supposed to.
2.  The percent of medical workers who didn't wash their hands was high.
3. If the underlined words are a mistake, write the correction above them. If they are not a mistake, write the underlined word.

<sup>1</sup> people      <sup>2</sup> carrots > hands      <sup>3</sup> positive  
<sup>4</sup> stick > carrot      <sup>5</sup> negative      <sup>6</sup> carrot. > stick      <sup>7</sup> in the patients' rooms > India

<sup>8</sup> did not know > knew

<sup>9</sup> bad

<sup>10</sup> negative      <sup>11</sup> carrot > stick

<sup>12</sup> most > few

4. What was the “carrot” in ¶ 9?

*a positive message on the board*

5.  It means the time period that someone works, for example, 8:00-5:00.

6. \_T\_ 1)

T 2)

F 3)

F 4)

### 7. Challenging Question.

*The message on the board and the count*

8. a)

### Exercise 8. Academic Vocabulary Definition Exercise

1.	aware
2.	motivating
3.	approach
4.	monitoring

**Exercise 9. Vocabulary Fill-in Exercise:** Choose the words in Exercise 5 to fill in the blanks below.

1. approach

2. monitor

3. motivating

4. aware