

1] 次の文章を読んで、各問に答えなさい。

In the future, robots may serve in a variety of support roles, such as home assistance, office support, nursing, childcare, education, and elder care. When we reach that point, people may share their personal lives with robots, which, in turn, may create long-term personal relationships in the mind of humans. Home robots, for example, could help humans with ①house chores; they could entertain them, teach them new skills, or encourage them to exercise. Robots may assist people with hobbies, such as carpentry or jewelry making, or help children with their homework and music lessons. In any of these roles, robots ②(to / the humans / be / monitor / may / required) they interact with, and engage in supportive interactions.

For example, a robot serving in a care facility might provide support by listening to the experiences and memories of elderly people. The way a robot responds to the human's communication in ③such scenarios may have a profound effect on various personal and relationship outcomes, including the human's perception of the robot, the human's sense of support and security, the human's willingness to continue to interact with the robot, and the human's overall well-being.

We know from Social ④ research that perceiving another person as responsive to one's needs is inherent to the formation of emotional bonds. The partner's perceived responsiveness, meaning their support and *validation of one's own emotional needs, benefits personal and relationship well-being because it signifies the belief that the other person can be counted on to reliably support us. Unfortunately, the social skills displayed by many caregiving robots are not sufficiently effective in evoking the appropriate sense of responsiveness that is characteristic of human disclosure and well-being.

In a newly published research study, we explored whether *implementing responsiveness cues in a robot would be compelling enough for these keys to human bonding to be also evident when interacting with an ⑤inanimate object. Specifically, we examined ⑥(responsive support / be / whether / receptive to / would / humans) from a robot, using the robot as a safe haven in times of need and as a base for becoming more confident in a subsequent stressful interaction.

⑦We found that people who interacted with a responsive robot (a) felt more positive about the robot; (b) had more desire to use the robot as a companion in stressful situations; and (c) their body language exhibited more approach behaviors towards the robot (e.g., ⑧). We see this as signaling warmth and interest in close contact.

(Adapted from <https://www.psychologytoday.com/blog/intimately-connected/201705>)

[注] *validation = 確認、検証 *implement = 実行する

問1 下線部 ① に相当するものを下記より3つ選び、その記号を書きなさい。

- | | | |
|---------------|-------------|----------------|
| (ア) driving | (イ) washing | (ウ) sleeping |
| (エ) cycling | (オ) holding | (カ) dealing |
| (キ) vacuuming | (ク) shaving | (ケ) disguising |
| (コ) ironing | | |

問2 下線部 ③ とはどんなことか。本文に沿って日本語で答えなさい。

問3 下線部 ④ には、“the science that deals with the human mind and its functions” という内容の学問の分野が入る。その分野を下記から1つ選び、その記号を書きなさい。

- | | | |
|----------------|------------------|-----------------|
| (ア) Ideology | (イ) Psychology | (ウ) Archaeology |
| (エ) Philosophy | (オ) Anthropology | |

問4 下線部 ⑤ の意味として最も適切なものを下記より1つ選び、その記号を書きなさい。

- | | | |
|----------------|------------------|-------------|
| (ア) activating | (イ) malnourished | (ウ) copious |
| (エ) lifeless | (オ) decent | |

問5 下線部 ② と ⑥ の () 内の語を文意に合うように並べ替えなさい。

問6 下線部 ⑦ を和訳しなさい。

問7 下線部 ⑧ に入る例として最も適切なものを下記より1つ選び、その記号を書きなさい。

- (ア) opening, fastening, and reclining
- (イ) curing, bending, and stretching
- (ウ) solace, laugh, and sign language
- (エ) leaning, smiling, and eye contact

- 2 次の文章中の①～⑤に最もあてはまるものを下記の (ア) ～ (オ) から1つずつ選び、その記号を書きなさい。

You've probably heard that calcium is important for strong bones, and you'd be right in the fact that this mineral is crucial to maintaining healthy bones. There are many bone-strengthening foods that are rich in calcium, even those that don't include milk and dairy. Many plant-based options can give you all the calcium you need, and your body (①) than dairy, since some of the acidic properties of dairy may cause an issue with absorption in the body.

Inflammation weakens the entire body, so eating an anti-inflammatory diet is a great place to start to build a healthy foundation. This (②), but you shouldn't avoid other benefits of calcium in case bone health doesn't concern you at this point. For instance, many young women who aren't at the age for menopause, or men who may feel their bones are strong enough, may not give much thought to their bone health either. However, calcium loss (③), and you could be suffering health problems if you're not getting enough.

Calcium (④), along with minerals such as magnesium and potassium. You know that feeling of anxiety that almost feels like you have something in your throat and you become out of breath quickly for no reason? It (⑤), specifically from calcium and magnesium. Both support the nervous system function, along with your blood pressure. They help slow down your blood pressure and can help steady your nerves as a result.

(Adapted from <http://www.onegreenplanet.org/natural-health>)

- (ア) will also ensure you're taking care of your body for the long-term
- (イ) can be caused by raised blood pressure from an insufficient mineral intake
- (ウ) is incredibly important for healthy blood pressure
- (エ) may possibly absorb more from plant-based sources
- (オ) can affect many aspects of your health

3 次の英文の下線部と同じ意味をもつ語句を (ア) ~ (エ) から 1 つずつ選び、その記号を書きなさい。

問 1 They asked experts for their opinions about the new governments.

- | | |
|----------------|------------|
| (ア) burdens | (イ) views |
| (ウ) hypotheses | (エ) pulses |

問 2 He and his opponent contended for first prize.

- | | |
|----------------|---------------|
| (ア) competed | (イ) mentioned |
| (ウ) worshipped | (エ) fetched |

問 3 The author got great wealth after he published a new book.

- | | |
|--------------|--------------|
| (ア) acquired | (イ) resolved |
| (ウ) settled | (エ) overcame |

問 4 Applicants arrived for a job interview one after another.

- | | |
|------------------------|------------------|
| (ア) for the time being | (イ) on account |
| (ウ) in succession | (エ) with regards |

問 5 His reputation was not good, but my curiosity got the better of me and I decided to meet him.

- | | |
|-----------------|---------------|
| (ア) constructed | (イ) evaluated |
| (ウ) annoyed | (エ) defeated |

4 日本文に合うように () に入る最も適切な語句を (ア) ~ (エ) から1つずつ選び、その記号を書きなさい。

問1 あなたは私に宿題を手伝ってほしいですか。

Would you ()?

- (ア) like to give me a hand to do your homework
- (イ) want me to participate in your schoolwork
- (ウ) please tell me what I can do for you at home
- (エ) like me to help you with your assignment

問2 まもなく台風がその地域を襲うだろう。

() the area.

- (ア) Before noon the typhoon might attack
- (イ) Without fail, the typhoon should get down
- (ウ) It will not be long before the typhoon hits
- (エ) None the less, the typhoon is breaking out

問3 私個人としては、彼らの結婚に反対ではありません。

() their marriage.

- (ア) As far as I'm concerned, I don't object to
- (イ) To the limit as for me, I'm not staying with
- (ウ) In spite of my will, I wish to neglect
- (エ) As long as my personal thing goes, I never oppose

問4 何か問題がありましたら、いつでも気軽にご連絡下さい。

() to contact us at any time.

- (ア) Suppose in any trouble, please hesitate
- (イ) Should you have any problems, please feel free
- (ウ) If something were to happen to you, please be eager
- (エ) Under questions, please do not excuse

問5 私は久しぶりにその町を訪れた。

I visited the town ().

- (ア) for the first time in ages
- (イ) within later periods
- (ウ) after such a short interval
- (エ) in a long time after I have left