

[I] 次の文章を読んで設問に答えなさい。[*印のついた語句は注を参照しなさい。](83点)

A skilled card player — eyes hidden by dark shades* and features kept as still as possible — looks at their hand. Any small giveaway that they're bluffing* or holding great cards could lose them a painfully large sum of money. Sometimes it helps to have a “poker face.”

Yet in day-to-day life — when socializing with family, friends and new acquaintances, for example — you might be better served letting your features fly free. Our research shows that moving your face in some way, whether you're smiling, raising an eyebrow or wrinkling your nose, may help people warm to you more.

In a study published last year, we found that people who were more facially expressive were more liked by a new social partner, which could explain why humans have evolved to have such expressive faces. Indeed, our species is probably the most facially expressive. People produce, on average, 101 facial movements per minute in a typical social interaction.

To understand why facial expressivity is so beneficial, we first need to emphasize just how crucial social bonding is to human survival. Throughout most of our evolutionary history, our species has relied on tight-knit communities to keep ourselves fed, sheltered, and protected from predators and dangerous outsiders. Managing social relationships was literally a matter of life or death. Otherwise you might have faced the tiger in the bushes alone. Any skill or behavior that improved someone's ability to create and maintain lifesaving bonds was likely to persist in our gene pool* and cultural repertoires* over the generations. And our research suggests that facial expressivity may fall (W) this category.

In our study, 52 people were filmed in an online social interaction with a researcher who posed as another participant. These dialogues

played out over a video platform, so people could see one another's face. Unbeknownst to* the real participants, the researcher orchestrated* various challenging social scenarios, such as telling an awful joke or demanding 80 percent of a reward in a negotiation. These situations mimicked everyday experiences such as social conflict,^(d) embarrassment or an attempt to make a good impression.

Throughout, we observed how people's faces moved. We also obtained recordings of more than 1,300 participants in free-flowing conversations with other (real) participants online. Automated software then coded the small facial muscle movements they made during these interactions.

Interestingly, more agreeable, extroverted* or neurotic* people, as measured by a questionnaire, were more facially expressive. People with these personality traits^(e) may devote more time and energy to social interactions — perhaps because they enjoy socializing or have greater-than-average concerns about how they come across to others.^(f) And that added effort could be worthwhile,^(g) we found. After these interactions, the participants and their social partners rated how much they liked each other — as did 176 other participants who viewed video clips of these people. The pattern was clear: people who were more facially expressive were more liked by others.

But why would facial expressivity improve someone's ability to build social bonds? Imagine meeting someone new and trying to figure out how good a fit they might be as a friend, colleague or romantic partner. You might wonder whether you can trust them, whether they will help you or harm you — and whether you can even begin to understand each other. Someone who is (あ) to (い) may (う) to be a more (え) prospect (お) someone who is (か) guarded.

Our findings support this interpretation. After their social interaction, participants reported their thoughts and feelings at various points

throughout the exchange. Later we compared what people were thinking (X) what other participants who saw video of their conversation “read” in their face. It turns out that more facially expressive participants were indeed broadcasting what was on their mind through their face. And people viewing these interactions thought the expressive participants appeared easier to read, which strongly related to their likability.

Simply put, being facially expressive may give others a sense that they understand you, which they like. This in turn supports the suggestion ^(h) that the key function of facial expressivity is to make us more predictable. Our work also underscores* that facial expressions do far more than just communicate emotions. We might raise our eyebrows to show we’re listening intently, share a knowing smile with a friend or use a stern look to stop someone in their tracks. Sending these kinds of messages doesn’t involve any particular emotional state. We also found that likability tracked with expressivity and not a particular emotion. You might guess, (Y), that people with cheerful expressions are best liked. But although happy expressions were highly likable, expressive people were better liked even when they weren’t especially smiley.

Furthermore, we found that participants’ level of expressivity didn’t change across situations or with different social partners, even as the specific emotions involved shifted. This suggests that facial expressivity is a consistent trait of an individual rather than something that changes depending on the context.

That last finding may leave you wondering why some people remain comparatively inexpressive across situations. We want to investigate that ⁽ⁱ⁾ question in future research. For some, the costs of revealing oneself may outweigh* the benefits, and there could be alternative routes to being an attractive social partner.

Clearly, (Z) of how expressive we tend to be overall, we can

also make choices about sharing more of ourselves in certain situations. Being more open and expressive may be scary — leaving people vulnerable — but our work shows that it comes with rewards. So for now, we think it's best to leave your poker face at the card table.

(By Eithne Kavanagh, Jamie Whitehouse and Bridget Waller,
writing for *Scientific American*, January 28, 2025)

- [注] hidden by dark shades 影で隠されて
bluffing (bluff はったりをかける)
gene pool 遺伝子プール (ある生物種の集団に存在する遺伝子の総体)
cultural repertoires 文化の総体
unbeknownst to ~に知られずに
orchestrated (orchestrate 周到に準備する)
extroverted 社交的な
neurotic 神経質な
underscores (underscore 強調する)
outweigh ~より価値がある

I - A 空所(W)~(Z)に入るもっとも適切なものを次の1~4の中からそれぞれ一つ
選び、その番号を解答欄に記入しなさい。

- | | | | | |
|-----|---------------|----------------|--------|--------|
| (W) | 1 behind | 2 in | 3 over | 4 to |
| (X) | 1 at | 2 from | 3 on | 4 with |
| (Y) | 1 as a result | 2 for instance | | |
| | 3 if only | 4 in case | | |
| (Z) | 1 because | 2 instead | | |
| | 3 out | 4 regardless | | |

I - B 下線部 (a)~(i) の意味・内容にもっとも近いものを次の 1 ~ 4 の中からそれぞれ一つ選び、その番号を解答欄に記入しなさい。

(a) giveaway

1 failure 2 hint 3 nomination 4 preparation

(b) typical

1 classical 2 formal 3 normal 4 official

(c) crucial

1 essential 2 optional 3 superficial 4 useful

(d) conflict

1 arrangements 2 disposition
3 disputes 4 management

(e) traits

1 characteristics 2 locations
3 observations 4 statistics

(f) worthwhile

1 affordable 2 honorable
3 remarkable 4 valuable

(g) figure out

1 assess 2 count 3 describe 4 doubt

(h) suggestion

1 definition 2 idea 3 knowledge 4 warning

(i) comparatively

1 firmly 2 inherently 3 relatively 4 wonderfully

I - C 波線部 (ア)~(ウ) の意味・内容をもっとも的確に示すものを次の 1 ~ 4 の中からそれぞれ一つ選び、その番号を解答欄に記入しなさい。

(ア) you might be better served letting your features fly free

- 1 it is perhaps beneficial to express a desire for freedom
- 2 it is possibly helpful to copy other people's expressions
- 3 it is probably an advantage to be facially expressive
- 4 it is sometimes valuable to imagine yourself flying

(イ) help people warm to you more

- 1 aid in making you feel hotter than others
- 2 guide you to be more exciting than others
- 3 lead you to be viewed more favorably
- 4 support people with opposing views to yours

(ウ) how they come across to others

- 1 how much they can disagree with other people
- 2 how often they unexpectedly meet other people
- 3 how other people understand and judge them
- 4 how they are being compared with other people

I - D 二重下線部の空所(あ)~(か)に次の 1 ~ 8 の中から選んだ語を入れて、本文の意味・内容に合う文を完成させたとき、(い)と(え)と(か)に入る語の番号を解答欄に記入しなさい。同じ語を二度使ってはいけません。選択肢の中には使われな
いものが二つ含まれています。

Someone who is (あ) to (い) may (う) to be a more
(え) prospect (お) someone who is (か) guarded.

- | | | | |
|-------------|----------|--------|---------|
| 1 appealing | 2 easier | 3 less | 4 more |
| 5 read | 6 seem | 7 than | 8 write |

I - E 本文の意味・内容に合致するものを次の1～8の中から三つ選び、その番号を解答欄に記入しなさい。

- 1 Humans are different from other animals, including mammals, because they have facial expressions.
- 2 Evolutionary history demonstrates that a closely integrated society was generally essential for humans to survive.
- 3 The people involved in a social interaction experiment were told in advance that they would be joined by a researcher.
- 4 Having watched the video clips of the conversations, people would start to focus on the overall appearance of the expressive participants.
- 5 Even facial expressions that are not cheerful or friendly can contribute to a person's likability.
- 6 The degree of a person's use of facial expressions is affected by various factors, particularly by feelings.
- 7 The authors have not yet clearly explained why there are some people who do not use facial expressions so much.
- 8 It is not recommended to utilize many facial expressions because it can make you feel unsafe.

I - F 本文中の太い下線部を日本語に訳しなさい。

Simply put, being facially expressive may give others a sense that they understand you

〔Ⅱ〕 次の文章を読んで設問に答えなさい。[*印のついた語句は注を参照しなさい。](67点)

Imagine you have just finished a workout. Your legs are like jelly, your lungs are burning and you just want to collapse on the couch. But instead, you pick yourself up and go for a ^(a)brisk walk. While this might seem counterintuitive*, doing some light activity after an intense workout — known as “active recovery” — has been suggested to reduce soreness and speed up recovery after exercise. But does it work or is it just another fitness myth?

Active recovery simply describes doing some low-intensity physical activity after a strenuous ^(c)bout* of exercise. This is commonly achieved through low-intensity cardio*, such as walking or cycling, but can also consist of low-intensity stretching, or even bodyweight exercises such as squats and lunges. The key thing is making sure the intensity is light or moderate, without moving into the “vigorous” range. As a general rule, if you can maintain ^(d)a conversation while you’re exercising, you are working at a light-to-moderate intensity. Some people consider doing an easy training session on their “rest days” as a form of active recovery. However, this has not really been researched. So we will be focusing on the more traditional form of active recovery in this article, (X) it is performed straight after exercise.

Active recovery helps speed up the removal of waste products, such as lactate* and hydrogen, after exercise. These waste products are moved from the muscles into the blood, before being broken down and used for energy, or simply excreted*. This is thought to be one of the ways it promotes recovery. (Y) some instances active recovery has been shown to reduce muscle soreness in the days following exercise. This may lead to a faster return to peak performance in some physical capabilities such as

jump height.

But, active recovery does not appear to reduce post-exercise inflammation*. While this may sound like a bad thing, it's not. Post-exercise inflammation can promote increases (Z) strength and fitness after exercise. And so when it's reduced (say, by using ice baths after exercise) this can lead to smaller training improvements than would be seen otherwise. This means active recovery can be used regularly after exercise without the risk of affecting the benefits of the main exercise session.⁽⁷⁾

Not all research on active recovery is positive. Several studies indicate it's no better than simply lying on the couch when it comes to reducing muscle soreness and improving performance after exercise. In fact, there's more research suggesting active recovery doesn't have an effect than research showing it does have an effect. While there could be several reasons for this, two stand out. First, the way in which active recovery is applied in the research varies a lot. It's likely there is a sweet spot in terms of (あ)(い) active recovery (う)(え) to (お) its benefits (more on this later). Second, it's likely the benefits of active recovery are trivial to small. As such, they won't always be considered "significant" in the scientific literature, despite offering potentially meaningful benefits at an individual level.^(f) In sport science, studies often have small sample sizes, which can make it hard to see small effects. But there doesn't seem to be any research suggesting active recovery is less effective than doing nothing, so at worst it certainly won't cause any harm.⁽¹⁾

Active recovery appears useful if you need to perform multiple bouts of exercise within a short time frame.^(g) For example, if you were in a tournament and had 10-20 minutes between games, then a quick active recovery would be better than doing nothing. Active recovery might also be a useful strategy if you have to perform exercise again within 24 hours

after intense activity. For example, if you are someone who plays sport and you need to play games on back-to-back* days, doing some low-intensity active recovery after each game might help reduce soreness and improve performance on subsequent days. Similarly, if you are training for an event like a marathon and you have a training session the day after a particularly long or intense run, then active recovery might get you better prepared for your next training session.

Conversely, if you have just completed a low-to-moderate intensity bout of exercise, it's unlikely active recovery will offer the same benefits. And if you will get more than 24 hours of rest between exercise sessions, active recovery is unlikely to do much because this will probably be long enough for your body to recover naturally anyway.

The good news is you don't have to do a lot of active recovery to see a benefit. A systematic review looking at the effectiveness of active recovery across 26 studies found 6-10 minutes of exercise was the sweet spot when it came to enhancing recovery. Interestingly, the intensity of exercise didn't seem to matter. If it was within this time frame, it had a positive effect. So it makes sense to make your active recovery easy (because why would you make it hard if you don't have to?) by keeping it in the light-to-moderate intensity range. However, don't expect active recovery to be a complete game changer. The research would suggest the benefits are likely to be small at best.

(By Hunter Bennette and Lewis Ingram, writing for *The Conversation*,
February 21, 2025, イギリス式のつづり・表記はアメリカ式に変更)

- [注] counterintuitive 直観に反した
bout 運動の回、セッション
cardio 心臓に良い運動
lactate 乳酸
excreted (excrete ～を排泄する)
inflammation 炎症
back-to-back 連続した

II - A 空所(X)～(Z)に入るもっとも適切なものを次の1～4の中からそれぞれ一つ
選び、その番号を解答欄に記入しなさい。

- | | | | | | | | | |
|-----|---|---------|---|---------|---|-------|---|-----|
| (X) | 1 | where | 2 | whether | 3 | which | 4 | why |
| (Y) | 1 | Against | 2 | As | 3 | In | 4 | To |
| (Z) | 1 | at | 2 | from | 3 | in | 4 | on |

II - C 波線部 (ア)～(ウ) の意味・内容をもっとも的確に示すものを次の 1～4 の中からそれぞれ一つ選び、その番号を解答欄に記入しなさい。

(ア) without the risk of affecting the benefits of the main exercise session

- 1 without compromising the positive effects of the primary workout
- 2 without creating a need to rest between the different session
- 3 without increasing the effort required for the next training period
- 4 without repeating the same exercise routine to get better results

(イ) at worst it certainly won't cause any harm

- 1 active recovery allows the body to restore itself without any pain
- 2 active recovery is at best unfortunately likely to cause some harm
- 3 the repair process of the body may be delayed by active recovery in some cases
- 4 though the benefits are unclear, active recovery has no negative effects

(ウ) a complete game changer

- 1 a full recovery break used between rounds of activity to prepare for the next
- 2 a major factor that helps you stay competitive without affecting the outcome
- 3 a new approach that significantly redefines the role or effect of recovery
- 4 a well-timed decision that influences the evolution of sporting rules

II - D 二重下線部の空所(あ)～(お)に次の1～8の中から選んだ語を入れて、本文の意味・内容に合う文を完成させたとき、(あ)と(い)と(え)に入る語の番号を解答欄に記入しなさい。同じ語を二度使ってはいけません。選択肢の中には使われないものが三つ含まれています。

there is a sweet spot in terms of (あ)(い) active recovery
(う)(え) to (お) its benefits

- | | | | |
|-------------|----------|----------|-----------|
| 1 effective | 2 how | 3 last | 4 long |
| 5 maximize | 6 remain | 7 should | 8 whether |

II - E 本文の意味・内容に合致するものを次の1～8の中から三つ選び、その番号を解答欄に記入しなさい。

- 1 Movements like lunges can be part of active recovery, if the degree of effort is at an appropriate level.
- 2 Active recovery is most effective when it pushes the body into vigorous intensity levels.
- 3 Lactate tends to build up more during active recovery than during full rest.
- 4 Ice baths after exercise have a positive effect by extending the period of post-exercise inflammation.
- 5 The majority of researchers now believe that active recovery is significantly better than passive rest in improving post-exercise performance.
- 6 Adding active recovery to an easy workout tends to provide less benefit than it does following a more physically challenging session.
- 7 Active recovery is essential when you have more than 24 hours of rest between workouts.
- 8 Even brief sessions of light exercise at the end of longer exercise sessions have been associated with recovery-related changes.

〔Ⅲ〕 次の会話を読んで設問に答えなさい。(50点)

(Charlie and Sam are friends talking about a movie they just saw together at home.)

Charlie: So, what did you think of the movie, *Space Fighter*? Pretty great, huh? You can't beat the classic science fiction movies. I can't believe you've never seen it before.

Sam: Hmm, I don't know.

Charlie: What do you mean "you don't know"? _____ (a)

Sam: Is it? It's just ... Isn't it kind of old? The special effects weren't great.

Charlie: Well, what did you expect for a 50-year-old movie? At the time, they were revolutionary. The movie won multiple awards for its design and special effects!

Sam: _____ (b) The aliens were obviously people in costumes. And I'm sure that some of the robots were just made from cardboard boxes.

Charlie: That's why everyone loves it though. It has heart! People made the items and special effects with their hands. They're much better than the CG you see in today's world.

Sam: In today's world, they make *Space Fighter* difficult to watch. It looks so unrealistic.

Charlie: Fine, OK, the special effects look a little dated. But what about the story and the characters? _____ (c) The cute robot, the one with the single repeating sound, has more personality than most modern characters.

Sam: At least the robot delivered its lines properly. I couldn't say the same about the others. I could hardly understand what they

were saying! And the story—a boy who finds out he has a secret power, gets a spaceship, and defeats the bad guys—is hardly original.

Charlie: At the time it was unique because there weren't many science fiction movies back then. This kind of story became famous because *Space Fighter* started it.

Sam: Yeah, yeah. (*rolls eyes and crosses arms, unimpressed*)

Charlie: _____ (d) _____ You can't say it wasn't impressive. Bill Johnson composed it. He scored nearly every big movie of that era.

Sam: I'll admit that the music is famous. But I've heard the theme song everywhere even though I had never seen the movie until today. _____ (e) _____

Charlie: Seriously? Are there any old science fiction movies that you like?

Sam: _____ (f) _____ I understand that these movies were important at the time, but they aren't watchable in today's world.

Charlie: I disagree. [CGに頼る前に今日の映画は古典からたくさん学ぶべきだと思う。] Things like good story structure, memorable music, great characters ...

Sam: And today's movies build on those things with better special effects, large writing teams, and greater visuals and audio.

Charlie: Yeah, but they also cost a lot of money to make. So, if they don't earn at least a billion dollars, they are considered a failure. *Space Fighter* was very successful and super cheap to make in comparison.

Sam: _____ (g) _____

Charlie: (*Sighs*) We're not going to agree on this, are we?

Sam: I guess not. Although I suppose we can agree on one thing.

Charlie: _____ (h)

Sam: I'm never watching a movie with you ever again!

(They both laugh.)

Ⅲ - A 空所 (a)~(h) に入るもっとも適切なものを次の 1~10 の中からそれぞれ一つ選び、その番号を解答欄に記入しなさい。同じ選択肢を二度使ってはいけません。選択肢の中には使われないものが二つ含まれています。

- 1 But they look so old!
- 2 I'm so tired of it!
- 3 I saw it in the cinema.
- 4 It's clearly a masterpiece.
- 5 It's definitely my favorite scene.
- 6 No, not really.
- 7 OK, well, what about the music?
- 8 They're legendary.
- 9 What's that?
- 10 Yeah, it looked like it, too.

Ⅲ - B 本文中の [] 内の日本語を英語で表現しなさい。

CG に頼る前に今日の映画は古典からたくさん学ぶべきだと思う。