

福島県立医科大学

平成28年度
医学部前期入学試験問題

英 語

(時間：100分)

注 意 事 項

- 1 試験開始の合図があるまで、この問題冊子の中を見てはいけません。
- 2 試験中に問題冊子の印刷不鮮明、ページの落丁・乱丁および解答用紙の汚れ等に気付いた場合は、手を挙げて監督者に知らせなさい。
- 3 解答は、すべて解答用紙の所定の欄に記入しなさい。
- 4 試験終了後、解答用紙のみを回収します。

[1] 次の文章を読み、問いに答えよ。

Many of our leisure pursuits involve competitive sports and games, (A) we are participants or spectators. The pressures of competition and being in front of an audience may or may not help athletes do their best. Being a member of a team can also influence (B) well an individual performs.

One of the first ¹psychologists to examine the psychology of sports was Norman Triplett, who at the end of the 19th century conducted experiments to see how competition affects our performance. He noticed that ²cyclists rode faster when competing against (C) than when they were riding (D) against the clock. To test whether or not competition actually improves performance, he devised an experiment in which children pulled a flag on a rope by turning a ³reel, either alone or competing in pairs. He found that they consistently recorded faster times when competing, and concluded that we have a competitive instinct that (E) us to perform better. Later studies have shown that ⁴rivalry actually has a physical effect too, and is (F) to physical changes such as increased heart rate and ⁵testosterone levels, which (G) our performance.

Other psychologists studying performance in sports noticed that participants did better not only when competing against somebody else, but also when they were simply doing something at the same time as other people, and even when they were just being watched by others. Gordon Allport called these the “coaction effect” and “audience effect,” and explained that we do things better in the presence of others, but not necessarily in competition. However, Robert Zajonc and others found that this was not always the case. When we do something we are already good at — a simple task or a skill we have practiced such as kicking a ball into a goal — we do it better with others there. But if it is something difficult, such as a tricky shot, the presence of other people has the opposite effect. We need to concentrate more on tasks that challenge us, and we are more likely to perform badly if we are distracted by people watching.

The presence of others is, of course, a crucial factor in team sports and activities. We have to not only perform well as individuals, but cooperate as a team. And although the presence of others and the element of competition may improve our performance, there is also a downside to working in a group. Individuals in a team tend to perform worse as the size of the group increases — especially if it's difficult to see how much effort each person is putting in. For example, in a ⁶tug-of-war, the more people there are on a team, the less effort each person will make to achieve an overall result. Bibb Latané described this effect of relying on others to put effort in as “social ⁷loafing.”

(4) (Marcus Weeks, *Heads Up Psychology*, modified)

Notes:

¹psychologist: someone who studies the human mind and how it affects behavior; a professional trained in psychology

²cyclist: someone who rides a bicycle

³reel: a round object around which you wind such things as thread, rope, wire or film

⁴rivalry: a state in which two people, companies, etc. are competing for the same thing

⁵testosterone: a hormone (= chemical substance produced in the body) that causes men to develop the physical and sexual features that are characteristic of the male body

⁶tug-of-war: a contest in which two teams pull at opposite ends of a rope until one drags the other over a central line

⁷loaf: spend your time not doing anything, especially when you should be working

問 1 (A) と (B) の部分に入る最も適切な英語 1 語をそれぞれ考え、答えよ。

問 2 (C) と (D) の部分に入る最も適切な英語 1 語をそれぞれ本文中から選び、答えよ。

問 3 (E) ~ (G) の部分に入る最も適切な語をそれぞれア～エのうちから1つずつ選び、記号で答えよ。

- | | | | | | |
|-----|---|-----|---|-----|--|
| (E) | {
ア. drives
イ. expects
ウ. requests
エ. warns | (F) | {
ア. applied
イ. linked
ウ. restricted
エ. transferred | (G) | {
ア. demand
イ. enhance
ウ. measure
エ. reflect |
|-----|---|-----|---|-----|--|

問 4 下線部(1)の内容を本文に即して日本語で具体的に説明せよ。

問 5 下線部(2)を日本語に訳せ。

問 6 下線部(3)の内容を本文に即して日本語で具体的に説明せよ。

問 7 下線部(4)の social loafing を説明するための下の英文を本文の内容に即して完成せよ。

Social loafing is the phenomenon in which people tend to ① _____
than ② _____.

[2] 次の文章を読み、(1)～(10)の部分に入る最も適切な語をそれぞれア～エのうちから1つずつ選び、記号で答えよ。

The ¹facial movements that sometimes accompany an emotion serve to communicate that emotion. Since the publication of Charles Darwin's classic, *The Expression of the Emotions in Man and Animals*, ²psychologists have regarded the communication of emotion as an important function, one that has survival value for the species. Looking (1) may warn others that they also may need to be concerned about approaching danger; perceiving that someone is angry tells us that he or she may be about to act aggressively, and seeing someone smile genuinely makes us feel safe and drawn to them.

Certain facial muscle movements seem to have a universal meaning, (2) the culture in which an individual is raised. The universal expression of anger, for example, involves a ³flushed face, eyebrows lowered and drawn together, ⁴flared nostrils, a ⁵clenched jaw, and exposed teeth. When people from five countries (the USA, Brazil, Chile, Argentina, and Japan) viewed photographs showing facial muscle movements typical of happiness, anger, sadness, disgust, fear, and surprise, they had little difficulty identifying the emotion that each face conveyed. Even members of remote groups that had had almost no (3) with Western cultures (the Fore and Dani peoples in New Guinea) were able to identify the emotions represented by faces of people from Western cultures. (4), American college students who viewed videotapes of facial muscle actions of Fore natives identified the emotions accurately, although they sometimes confused fear and surprise. Even though facial muscles vary from person to person, the muscles needed to produce these universally recognized emotions appear to be basic and (5) across people, suggesting that the human face has evolved to transmit emotion signals and the human brain has evolved to interpret these signals correctly.

The universality of the facial muscle movements (6) with certain emotions supports Darwin's claim that they are (7) responses to an evolutionary history. According to Darwin, many of the ways in which we communicate emotion are inherited patterns that originally had some survival value. For example, the expression of (8) is based on the organism's attempt to get rid of something unpleasant — perhaps even poisonous — that it has ⁶ingested.

The fact that the facial muscle movements of emotions communicate important information is demonstrated even more powerfully when the facial pattern of one person by itself changes the behavior of another person. Such evidence is provided by studies of infants' interactions with their mothers. In one study, infants who had just started to (9) were placed on a piece of specially designed equipment called a *visual cliff*. This tool was created by psychologists to examine the development of babies and infants as they gain the capacity to move around. It consists of two surfaces, both displaying the same pattern and covered by a sheet of thick glass. One surface is directly under the glass; the other is a short distance (several feet) below it. The infant is put on a central board, or platform, between the deep side and the shallow side. Because of the single sheet of glass, the "cliff," or sudden drop, is not a real drop, but a virtual cliff. When the infants in this study approached the edge of the "cliff," they would look to their mother. In one condition, mothers had been instructed to move their facial muscles to produce an expression of intense fear. In another, they were instructed to smile broadly. In most cases, the mothers' facial muscle movements (10) the infants' uncertainty about the danger: babies whose mothers showed fear never crossed to the deep side, whereas 74 per cent of those whose mothers smiled did.

(Susan Nolen-Hoeksema, Barbara L. Fredrickson, Geoffrey R. Loftus, Christel Lutz, *Atkinson & Hilgard's Introduction to Psychology*, 16th edition, modified)

Notes:

¹facial: of the face

²psychologist: someone who studies the human mind and how it affects behavior; a professional trained in psychology

³flushed face: a face that is redder than usual

⁴flared nostrils: the two openings of the nose that are wider and tenser than usual

⁵clenched jaw: the upper and lower jaw that are closed tightly together

⁶ingest: take food, liquid or drugs into the body by swallowing

(1) {
ア. scary
イ. frightened
ウ. alarming
エ. terrific

(2) {
ア. in spite of
イ. regardless of
ウ. based on
エ. depending on

(3) {
ア. touch
イ. contact
ウ. interface
エ. correspondence

(4) {
ア. Likewise
イ. Nevertheless
ウ. Obviously
エ. Accordingly

(5) {
ア. constant
イ. perpetual
ウ. correct
エ. united

(6) {
ア. interpreted
イ. stimulated
ウ. referenced
エ. associated

(7) {
ア. nervous
イ. internal
ウ. innate
エ. extinct

(8) {
ア. grief
イ. irritability
ウ. disgust
エ. anxiety

(9) {
ア. drag
イ. mobilize
ウ. walk
エ. crawl

(10) {
ア. determined
イ. divided
ウ. checked
エ. resolved

[3] 次の文章を読み、問いに答えよ。

Pain can have a range of different meanings for people. Pain serves quite a useful purpose when it draws attention to injury or illness. Many pains pass very quickly and have a limited impact on the person's life. For example, if you fall and ¹bruise your knee, you know the reason for the pain and that it will go away eventually, whereas with chronic pain ⁽¹⁾ the situation is less straightforward. In the latter case, pain has stopped serving any useful purpose, and it is impossible to say how long it will persist; indeed for many patients it may persist for the rest of their lives. For cancer patients, increasing levels of pain may be ²equated with disease progression and be viewed as an image of ³impending death by both patient and family. Such an interpretation ⁽²⁾ may result in patients experiencing more pain since there is evidence that severity of pain is associated with how people interpret the significance of their pain. For example, Spiegel and Bloom (1983) found a significant correlation between the belief that pain was a sign of worsening disease and reports of more severe pain.

The pain of childbirth is often viewed by women as being different to other types of pain. It has a very special meaning since it results in the birth of a child and, consequently, is seen in a more positive light. In a small study of psychological factors associated with pain in ⁴labour reported by Moore (1997), many of the women had a very positive attitude towards labour pain. ⁽³⁾ The pain was 'worth the ⁵discomfort', 'a wonderful thing' and 'had meaning'. Such attitudes may be encouraged by a partner who is supportive throughout pregnancy and labour and have been shown to reduce pain during labour (Bonica, 1994). By contrast, a negative attitude towards the pregnancy ⁽⁴⁾ may result in an increase in pain perception during labour.

The meaning a person associates with a given illness is often closely linked with the coping strategies which are adopted to cope with the difficulties of that illness ⁽⁵⁾ (Lipowski, 1970). This researcher found that the meaning of illness in North American culture can be classified as challenge, enemy, punishment, weakness, loss, or value.

A number of nurse researchers have found that Lipowski's categories are represented in the meaning patients associated with their pain (Copp, 1974; Barkwell, 1991; Ferrell & Dean, 1995). It is clear that patients derive a range of different meanings from their pain experience. Ferrell and Dean suggest that an important intervention for those who interpret pain in a negative way is to assist them to acquire a more positive meaning for their pain. For instance, if patients believe that their pain cannot be controlled, then it should be demonstrated that the pain can be relieved. This suggestion is supported by the findings of Arathzik's (1991) study of women with spread breast cancer, which demonstrated that patients who perceive their pain as threatening or harmful find it difficult to accept pain and do not think they can live with it. ⁽⁶⁾ This reaction is associated with a higher reported pain intensity. Conversely, patients who viewed their pain in a more positive light experienced less emotional discomfort from their pain and were able to devise a range of strategies to deal with pain. This reaction was associated with less reported pain intensity.

(Jan Hawthorn and Kathy Redmond, *Pain: Causes and Management*, modified)

Notes:

¹bruise: make a blue, brown or purple mark appear on the skin after you have fallen or been hit

²equate: consider that two things are similar or connected

³impending: close at hand

⁴labour: (*labor* in North American English) the period of time or the process of giving birth to a baby

⁵discomfort: a feeling of slight pain or of being physically uncomfortable

問 1 下線部(1)の chronic pain とは何か。本文に即して日本語で説明せよ。

問 2 下線部(2)の内容を本文に即して日本語で具体的に説明せよ。

問 3 下線部(3)の a very positive attitude towards labour pain と下線部(4) a negative attitude towards the pregnancy は、それぞれどのような事態をもたらすか。本文に即して日本語で述べよ。

問 4 下線部(5)を日本語に訳せ。

問 5 下線部(6)を日本語に訳せ。

[4] 次の文章を読み、全て英語にせよ。

「解剖学は記憶しなければならないことが多い」とか「解剖学は耳慣れない用語ばかりでなじめない」などよくいわれています。実際、²看護学生や³医学生に「苦手な科目は？」と聞いてみると、大概は解剖学を第一に挙げるでしょう。確かに解剖学の教科書は分厚いものが多いし、何のことをいっているのかわからないことだらけで読む気がしないのかもしれませんが。

(坂井建雄, 橋本尚詞『ぜんぶわかる人体解剖図』一部改変)

註:

¹解剖学: anatomy

²看護学生: nursing student (s)

³医学生: medical student (s)