

2022

1º Semestre



BLOCO 4

• Inglês

VESTIBULAR  **FGV**

UNIFICADO

15\11\2021

GABARITO

Texto para as perguntas de 1 a 8**COVID-19 AND TOUCH**

1 The pandemic has been an exercise in subtraction. There are the voids [*vazios*] left by loved ones who have succumbed to covid-19, the gaps [*lacunas*] where jobs and schools used to be, and the absence of friends and family. And then there are the smaller things that are missing. To stop the spread of covid-19, people have forsaken [*abandonaram, renunciaram a*] the handshakes, pats [*tapinhas*], squeezes [*apertos leves*], and strokes [*afagos, carícias*] that warm [*dão calor às*] daily interactions. The loss of any one hardly seems worthy of note.

2 And yet touch is as necessary to human survival as food or water, says Tiffany Field, director of the Touch Research Institute at the Miller School of Medicine, part of the University of Miami. It is the first sense to develop and the only one necessary for survival. We can live with the loss of sight or hearing. But without touch, which enables us to detect such stimuli as pressure, temperature, and texture, we would be unable to walk or feel pain. Our skin is the vehicle through which we navigate the world.

3 Certain groups have long been starved of touch. For centuries lepers [*leprosos*] were considered untouchable. Dalits, the lowest caste in India, were literally known as "Untouchables." Solitary confinement is used as a punishment in prisons. In a film made before his death in 2015 Peter Collins, a Canadian convict locked up alone, said he craved [*almejava*] so intensely the touch of another human being that he pretended the flies walking on his skin were his wife's fingers. But not until the pandemic, with its widespread social distancing, have such vast swathes [*faixas*] of the population been deprived of friendly physical contact for so long.

4 Humans need touch to form close relationships. To improve its chances of survival, Homo sapiens evolved to live in groups. Humans "need to interact with each other," explains Alberto Gallace, a psycho-biologist at the University of Milano-Bicocca, which may explain why, like other social animals, they have developed a neurological system designed to respond to affectionate touch. Stimuli applied to the skin at a certain pressure and speed – "basically a caress [*carícia*]," says Dr. Gallace – activates a specific nerve fiber in the skin. Stimulating this fiber lights up parts of the brain responsible for pleasure, releasing a cocktail of hormones, including dopamine, serotonin, and oxytocin, that soothe anxiety and make us feel happier.

5 The importance of touch starts early. A review of scientific literature conducted in 2016 found that babies who had skin-to-skin contact with their mothers immediately after birth were 32% more likely to breastfeed [*amamentar*] successfully on their first attempt than those who did not. Several hours later, they also had better heart and lung function and higher blood-sugar levels. In one study in 1986 in America premature babies who were given regular massages for ten days shortly after they were born gained weight more quickly and left intensive care sooner than premature babies who were not. Their physical and cognitive development was also better than the control group in tests a year later.

6 The positive health effects continue. Touch depresses levels of cortisol, a hormone produced in response to stress. In addition to triggering the "fight or flight" [*lutar ou fugir*] response, cortisol suffocates "natural killer cells," a type of white blood cell that attacks viruses and bacteria. Touch can also increase the production of natural killer cells in patients with HIV and cancer, according to Dr. Field. In 2014 researchers at Carnegie Mellon University observed that healthy adults who were hugged more frequently were less likely to get colds, perhaps because such embraces are a way of communicating affection, and people who feel cared for are less likely to fall ill [*ficar doentes*].

7 Without regular contact people can become "skin hungry," a state in which they experience less touch than they want. The few studies that have been done into skin hunger suggest it is harmful. A survey of 509 adults from around the world in 2014 suggested that being deprived of touch was linked to loneliness, depression, stress, mood and anxiety disorders, and secondary immune disorders. In any event, it's clear that the pandemic has made many more people aware of their craving for touch.

Adapted from *The Economist*, February 20, 2021.

- 1 In paragraph 1, the sentence "The loss of any one hardly seems worthy of note" most likely refers to which of the following?
 - ☐ When a disaster like the covid-19 pandemic destroys so many things, each individual loss can seem unimportant.
 - ☐ Many people would rather not think about the physical and emotional losses that have occurred because of covid-19.
 - ☐ Many people infected with covid-19 have lost their senses of taste and smell, and, in certain cases, even their sense of touch.
 - ☒ Fighting against covid-19 by avoiding certain kinds of physical interactions appears to be a small sacrifice.
 - ☐ So many small yet important things have been lost because of covid-19 that it's hard to know which is the most important.
- 2 You can conclude from the information in the article that Tiffany Field most likely believes which of the following?
 - ☐ Our ability to understand the world is based primarily on our sense of touch.
 - ☐ A human being's relationship to his or her skin is the same as a sailor's relationship to a ship.
 - ☐ If a baby developed a sense of touch only after developing its senses of sight and hearing, the result would be fatal.
 - ☐ Without the sense of touch it would in fact be easier to live in extremely cold or hot climates.
 - ☒ A functioning sense of touch is a matter of life or death.
- 3 The article most likely mentions lepers and Dalits in order to
 - ☐ highlight the fact that forbidding people to touch others can be a form of punishment and oppression.
 - ☐ point out that all humanity is united in its reliance on the sense of touch.
 - ☒ give a historical example of a current phenomenon.
 - ☐ argue against the arbitrary nature of widespread government-enforced quarantines.
 - ☐ help put the current situation of the covid-19 pandemic in a more realistic, less apocalyptic context.
- 4 With respect to Peter Collins (paragraph 3), the information in the article most likely supports which of the following?
 - ☐ Before his execution, he was kept in solitary confinement.
 - ☒ In his case, the touch of flies was probably better than nothing.
 - ☐ After entering prison he had no more contact with his wife.
 - ☐ He feared solitary confinement more than he feared any other punishment.
 - ☐ His uncontrollable desire to be touched was an exaggerated response to a unique situation.
- 5 With respect to touch, which of the following is most likely an ironic result of the covid-19 pandemic?
 - ☐ The widespread social distancing motivated by the covid-19 pandemic will permanently change fundamental aspects of human society.
 - ☐ Scientists now believe that touch is in fact the most basic, most important component of civilization.
 - ☒ What had been considered a natural, healthy, and vital aspect of human interaction is now seen as potentially deadly.
 - ☐ The discovery that all social animals possess a neurological system that reacts positively to affectionate touch has revealed that Homo sapiens are not at all unique.
 - ☐ Scientists now know that the pleasant feeling a person gets from a caress is not only an emotional reaction but also a biological reaction.
- 6 As mentioned in paragraph 5, which of the following is most likely an item covered by a scientific study?
 - ☒ A short-term technique that can stimulate a certain kind of baby's development.
 - ☐ The inherent value of breastfeeding a baby.
 - ☐ The danger of separating babies from their mothers just after birth.
 - ☐ Reasons why skin-to-skin contact is essential to a mother's strong relationship with her baby.
 - ☐ The best way to help newborn babies breastfeed successfully on their first attempt.
- 7 Which of the following is most likely **not** supported by the information in the article?
 - ☐ A healthy supply of affectionate touch may alter our natural reaction to dangerous situations.
 - ☒ A constant supply of affectionate touch has been shown to stimulate the production of certain kinds of dangerous white blood cells.
 - ☐ A high level of cortisol in our bodies can weaken our natural defense against certain kinds of health problems.
 - ☐ It is possible that frequent hugs may start a kind of chain reaction that promotes less sickness in a person.
 - ☐ Although they do so in different ways, both touch and the production of cortisol can help us to survive.
- 8 The main purpose of the last paragraph is most likely to
 - ☐ warn about a common but often-ignored health problem.
 - ☐ highlight an important argument against social distancing.
 - ☐ point out the main reason for so much of the widespread suffering that has occurred during the covid-19 pandemic.
 - ☒ regarding the pandemic, identify a possible consequence and its possible side effects.
 - ☐ discuss a little-known emotional disorder – "skin hunger" – that will be an integral part of post-pandemic world society.

Texto para as perguntas de 9 a 15

THE PERCEPTION OF TIME

1 A number of competing ideas explain why, as we age, our perception of time accelerates. One theory notes that our metabolism slows as we get older, matching the slowing of our heartbeats and our breathing. Just as with a stopwatch [*cronômetro*] that is set to run fast, children's versions of these "biological clocks" tick more quickly. In a fixed period of time children experience more beats of these biological pacemakers [*marca-passos*] (breaths or heartbeats, for example), making them feel as if a longer time has elapsed.

2 A competing theory suggests that our perception of time's passage depends on the amount of new perceptual information we are subjected to from our environment. The more novel stimuli, the longer our brains take to process the information. The corresponding period of time seems, at least in retrospect, to last longer. This argument can explain the movie-like perception of events playing out in slow motion in the moments immediately preceding an accident. It might be that rather than time actually slowing during the event, our recollection of the event is decelerated in hindsight [*compreensão tardia*], as our brain records more detailed memories based on the flood of data it receives. Experiments on subjects experiencing the unfamiliar sensation of free fall [*queda livre*] have demonstrated this.

3 This theory ties in nicely with the acceleration of perceived time. As we age, we tend to become more familiar with our environments and with life experiences. Our daily commutes [*deslocamentos de ida e volta entre a casa e o lugar de trabalho*], which might initially have appeared long and challenging, full of new sights and opportunities for wrong turns, now flash by as we navigate familiar routes on autopilot.

4 It is different for children. Their worlds are often surprising places filled with unfamiliar experiences. Youngsters are constantly reconfiguring their models of the world around them, which takes mental effort and seems to make the sand run more slowly through their hourglasses [*ampulhetas*] than for routine-bound [*amarrados à rotina*] adults. The greater our acquaintance with the routines of everyday life, the quicker we perceive time to pass, and generally, as we age, this familiarity increases. This theory suggests that, to make our time last longer, we should fill our lives with new and varied experiences, eschewing [*evitando*] the time-sapping [*consumidora de tempo*] routine of the mundane.

5 Neither idea explains the almost perfectly regular rate at which our perception of time seems to accelerate. The fact that the length of a fixed period of time appears to reduce continually as we age suggests an "exponential scale" to time. We employ exponential scales instead of traditional linear scales when measuring quantities that vary over a huge range of different values.

Adapted from *Natural History*, February 2020.

9 Which of the following is most supported by the information in the article?

- ☐ Time itself does not move at a fixed pace, but rather speeds up or slows down depending on the circumstances.
- ☒ Our perception of time may be linked to the functioning of our heart and lungs.
- ☐ Since older people have comparatively less time to live, they tend to spend it more wisely than children do.
- ☐ The faster a heart beats, the shorter a period of time will seem.
- ☐ For children, their faster metabolism counterbalances the slower passage of time.

10 With respect to the information in the article, in which of the following situations would time, in general, most likely pass quicker than usual for a child?

- ☒ Far from danger, the child is quarantined in a happy, familiar environment.
- ☐ The child faces an unexpected life-and-death situation in which he needs to act quickly.
- ☐ The child is falling asleep when he is startled by a loud noise.
- ☐ A sudden accident has trapped a hungry child in a dark tunnel, and he must find a way out.
- ☐ For the first time in his life, the child has just run 50 meters as fast as possible.

11 At the end of paragraph 2, “this” in the sentence “Experiments on subjects experiencing the unfamiliar sensation of free fall have demonstrated this” most likely refers to a

- ☐ biological limit that impedes our brain’s ability to process novel stimuli.
- ☐ speedy flood of new, unrecognizable data.
- ☐ distorted view of the relative values of time and space.
- ☐ terrified reaction to an unexpected and dangerous event.
- ☒ phenomenon that may cause time to seem slower.

12 In paragraph 3, the author of the article most likely mentions “Our daily commutes” in order to

- ☒ help illustrate one common occurrence related to getting older.
- ☐ show that it is not only in dangerous or extreme events that time seems to pass more quickly.
- ☐ point out that even simple everyday activities can make time go either faster or slower.
- ☐ emphasize some key differences between real time and perceived time.
- ☐ propose a counter-argument to the standard interpretation of a simple, repetitive activity.

13 The first sentence in paragraph 4 – “It is different for children” – most likely refers to the idea that

- ☐ children are rarely able to accurately express their sensations regarding the passage of time.
- ☐ little children should be careful in approaching new and unfamiliar experiences.
- ☒ greater experience enables adults to comprehend their environment more easily than children do.
- ☐ a child’s hourglass and an adult’s hourglass cannot measure the same hour.
- ☐ ideally, the goal of any child’s education should be to make time pass more quickly.

14 Which of the following is most supported by a theory mentioned in the article?

- ☐ A person’s true understanding of the value of time can only come with age.
- ☐ Time is unchangeable, but we are not.
- ☐ If you love life then do not waste time, for that is the stuff of which life is made.
- ☒ For anyone who loves life, constant novelty can be gratifying.
- ☐ While childhood can be pleasurable, to truly enjoy life one needs to be an adult.

15 As explained in the last paragraph, an exponential scale would most likely be applied to help us understand all of the following phenomena **except**

- ☐ a 10-year period in a person’s life that seems to pass as quickly as an earlier 5-year period.
- ☐ a local outbreak of an infectious disease that quickly spreads and turns into a serious epidemic.
- ☐ the energy released by a major earthquake.
- ☐ the nature of the sound waves produced by a huge explosion.
- ☒ the action of one domino knocking over another domino until all the dominos in a long line are down.