

英语二阅读真题同源过关练习连载二

文章来源：经济学家 段落：五段 字数：435 内容：动物实验与健康

要求：A. 做题 B. 找到出题处 C. 挑五个句子翻译 D. 将文中单词认真背完

Once upon a time the overstressed executive bellowing orders into a telephone, cancelling meetings, staying late at the office and dying of a heart attack was a stereotype of modernity. That was before the Whitehall studies, a series of investigations of British civil servants begun in the 1960s. These studies found that the truth is precisely the opposite. Those at the top of the pecking order actually have the least stressful and most healthy lives. Cardiac arrest-and, indeed, early death from any cause-is the prerogative of underlings.

Such results have since been confirmed many times, both in human societies and in other primate species with strong social hierarchies. But whereas the pattern is well-understood, the biological mechanisms underlying it are not. A study just published in the Proceedings of the National Academy of Sciences, however, sheds some light on the matter.

In it, a group of researchers led by Jenny Tung and Yoav Gilad at the University of Chicago looked at the effects of status on rhesus macaques. Experience has shown that these monkeys display the simian equivalent of the Whitehall studies' findings. The high risk of disease among those at the bottom of the heap in both cases suggests that biochemical responses to low status affect a creature's immune system. Those responses must, in turn, depend on changes in the way the creatures' genes are expressed. To investigate this phenomenon means manipulating social hierarchies, but that would be hard (and probably unethical) if it were done to human beings. You can, however, do it to monkeys, and the researchers did.

Dr Tung and Dr Gilad took 49 middle-ranking female macaques and split them into groups of four or five. The researchers were able to control where in a group an individual ranked by the order in which it was introduced into its group (newly introduced monkeys almost always adopt a role subordinate to existing group members). The hierarchies thus established, the team conducted tests on cells in the monkeys' blood, in an attempt to determine the effect of a macaque's rank on her biochemistry and, in particular, on how rank influences the activity of various genes.

As with any animal study, this one cannot simply be mapped straight onto humans. But it does provide pointers that researchers who work on people can use. In particular, the experiment ensured that social rank was the only factor

being changed, providing strong evidence that the chain of causality runs from low social status, through a disrupted immune system to worse health, and not the other way around. The best medicine, then, is promotion. Prosper, and live long.

1. Executives at the high rank

- A. lead a happy and meaningful life
- B. suffer from tremendous stress
- C. fall into victims of violence
- D. have a pressure-free and healthy life

2. The reason why the experiment is performed on monkeys is that

- A. it is easy and has less to do with moral principles
- B. monkeys are willing to be done so
- C. human beings are more selfish and self-centered
- D. the experiment is difficult and costly

3. The hierarchies are built by the means of

- A. measuring their weight
- B. predicting their development
- C. judging their ability
- D. defining their sequence

4. The phrase 'mapped onto' in the last paragraph may mean

A. deprived of B. applied to C. translated into D. regarded as

5. The best title of the passage may be

A. modern leaders and leadership

B. never say never

C. social status and health

D. rank, animal experimentations and pressure

答案: DADBC

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全文翻译:

曾今，人们对现代化的一个根深蒂固的印象是，领导们在巨大压力的折磨之下，对着电话狂吼，下达命令，取消会议，待在办公室到很晚，最后死于心脏病。可是，自二十世纪六十年代开始的英国白厅对英国政治家们展开的一系列调查之后，这种印象开始改变，因为调查发现事实却完全不是那么回事。实际上处于社会高层的人们承受的压力最小，生活最健康。心跳骤停——而且，确实是，不管是出于什么原因的早死——那都是做下属的才有的事。

在人类社会，还有等级严格的其他的灵长类物种中，都已多次验证这种结果的正确性。但是，虽然这种模式很容易理解，潜在的生物学机制却并不这么认为。杂志《国家科学院》最新出版的专题里，对此现象有相关阐述。

专题里，詹妮东和要吉拉德领导的研究小组在芝加哥大学，研究地位之于恒河猴的影响。实验经过表明，这些猴子所表现出来的是英国白厅研究发现的猴子版本。社会地位低的患病风险高，这既适用于人类界也同样适用于猴子。这暗示了社会地位低的物种的生物化学反应影响其免疫系统。反过来，这种生物化学反应又取决于物种生物基因的变化方式。若要调查这种现象，那就意味着需要控制社会等级，在人类身上进行，很困难（而且很可能不道德）。但是，你可以在猴子身上做实验，而且研究人员也是这么做的。

博士东和吉拉德，用 49 个中等地位等级的女性猴子做实验，并把他们分为四到五组。根据猴子们加入研究群体的时间顺序，研究人员给她们的地位等级编号（新来的都是要听前辈的，这是潜规则）。等级于是得以建立。研究团队采集猴子血液做细胞研究，试图搞清楚恒河猴的地位等级对其生物化学的影响，特别是地位等级是如何对各种基因活动起作用的。

不管以什么动物为研究对象，结果都不能直接简单地运用于人类，这个也不例外。但它确实给研究人类的学者们提供了一些建议。该实验的独特之处是，它确保了实验中社会等级是唯一发生改变的因素。它为因果关系链的正确模式提供了一个强有力的证据，正确模式是低等的社会等级通过被破坏了的免疫系统损害健康。而不是反过来的顺序。晋升是疗效最好的药物。因为成功，所以活得长久。