

2021年12月·第2套 英语六级长篇阅读（信息匹配） 第1篇·36-45 题答案与解析

STATEMENTS & ANALYSIS • 信息匹配题和解析

信息匹配题和解析·36-45 题

本页 36-45 题的段落匹配答案与逐句解析由懒笔记基于2021年12月·第2套 英语六级长篇阅读（信息匹配）原卷逐题核对整理。与试卷排版同一卷面：先是 Directions 与 15 段字母标号长文（逐段附中文翻译）；之后 10 句陈述逐句排列，每句英文陈述后紧接本句解析——陈述句中译、信息所在段落、锚点强弱、定位句中英对照、陈述句与原文的同义改写对照与易混相邻段辨析。

真题卷第2套(2021-12)·六级

Part III Section B

Directions: In this section, you are going to read a passage with ten statements attached to it. Each statement contains information given in one of the paragraphs. Identify the paragraph from which the information is derived. You may choose a paragraph more than once. Each paragraph is marked with a letter. Answer the questions by marking the corresponding letter on **Answer Sheet 2**.

Do music lessons really make children smarter?

A) A recent analysis found that most research mischaracterizes the relationship between music and skills enhancement.

最近的一项分析发现,大多数研究错误地描述了音乐与技能提升之间的关系。

B) In 2004, a paper appeared in the journal *Psychological Science*, titled "Music Lessons Enhance IQ." The author, composer and psychologist Glenn Schellenberg had conducted an experiment with 144 children randomly assigned to four groups: one learned the keyboard for a year, one took singing lessons, one joined an acting class, and a control group had no extracurricular training. The IQ of the children in the two musical groups rose by an average of seven points in the course of a year; those in the other two groups gained an average of 4.3 points.

2004年,《心理科学》杂志上发表了一篇题为《音乐课程提高智商》的论文。作者Glenn Schellenberg是作曲家兼心理学家,他对144名儿童进行了实验,这些儿童被随机分配到四组:一组学习键盘一年,一组上声乐课,一组参加表演班,对照组没有课外培训。两个音乐组儿童的智商在一年内平均上升了7分;另外两组的儿童平均上升了4.3分。

C) Schellenberg had long been skeptical of the science supporting claims that music education enhances children's abstract reasoning, math, or language skills. If children who play the piano are smarter, he says, it doesn't necessarily mean they are smarter because they play the piano. It could be that the

youngsters who play the piano also happen to be more ambitious or better at focusing on a task. Correlation, after all, does not prove causation.

Schellenberg长期以来一直对支持音乐教育能增强儿童抽象推理、数学或语言技能这一说法的科学依据持怀疑态度。他说,如果弹钢琴的孩子更聪明,这并不一定意味着他们因为弹钢琴而更聪明。也可能是弹钢琴的孩子恰好更有抱负或更善于专注于任务。毕竟,相关性并不能证明因果关系。

- D) The 2004 paper was specifically designed to address those concerns. And as a passionate musician, Schellenberg was delighted when he turned up credible evidence that music has transfer effects on general intelligence. But nearly a decade later, in 2013, the Education Endowment Foundation funded a bigger study with more than 900 students. That study failed to confirm Schellenberg's findings, producing no evidence that music lessons improved math and literacy skills.

2004年的论文就是专门为解决这些担忧而设计的。作为一名充满热情的音乐家,Schellenberg在发现音乐对一般智力有迁移效应的可信证据时感到非常高兴。但将近十年后,在2013年,教育捐赠基金会资助了一项涉及900多名学生的更大规模研究。该研究未能证实Schellenberg的发现,没有产生音乐课程提高数学和读写能力的证据。

- E) Schellenberg took that news in stride while continuing to cast a skeptical eye on the research in his field. Recently, he decided to formally investigate just how often his fellow researchers in psychology and neuroscience make what he believes are erroneous—or at least premature—causal connections between music and intelligence. His results, published in May, suggest that many of his peers do just that.

Schellenberg从容地接受了这一消息,同时继续对其研究领域的研究持怀疑态度。最近,他决定正式调查他在心理学和神经科学领域的同行研究者在音乐与智力之间建立他认为错误的——或至少是过早的——因果联系的频率。他在5月发表的结果表明,他的许多同行确实这样做了。

- F) For his recent study, Schellenberg asked two research assistants to look for correlational studies on the effects of music education. They found a total of 114 papers published since 2000. To assess whether the authors claimed any causation, researchers then looked for telltale verbs in each paper's title and abstract, verbs like "enhance," "promote," "facilitate," and "strengthen." The papers were categorized as neuroscience if the study employed a brain imaging method like magnetic resonance, or if the study appeared in a journal that had "brain," "neuroscience," or a related term in its title. Otherwise the papers were categorized as psychology. Schellenberg didn't tell his assistants what exactly he was trying to prove.

在最近的研究中,Schellenberg让两名研究助理寻找关于音乐教育效果的相关性研究。他们找到了自2000年以来发表的总共114篇论文。为了评估作者是否声称存在任何因果关系,研究人员随后在每篇论文的标题和摘要中寻找标志性动词,如"增强"、"促进"、"促成"和"加强"。如果研究采用了磁共振等脑成像方法,或者研究发表在标题中含有"大脑"、"神经科学"或相关术语的期刊上,论文就被归类为神经科学。否则论文被归类为心理学。Schellenberg没有告诉他的助手他究竟想证明什么。

- G) After computing their assessments, Schellenberg concluded that the majority of the articles erroneously claimed that music training had a causal effect. The overselling, he also found, was more prevalent among neuroscience studies, three quarters of which mischaracterized a mere association between music training and skills enhancement as a cause-and-effect relationship. This may come as a surprise to some. Psychologists have been battling charges that they don't do "real" science for some time—in large part because many findings from classic experiments have proved

unreproducible. Neuroscientists, on the other hand, armed with brain scans and EEGs(脑电图), have not been subject to the same degree of critique.

在计算评估结果后,Schellenberg得出结论,大多数文章错误地声称音乐训练具有因果效应。他还发现,这种过度宣传在神经科学研究中更为普遍,其中四分之三的研究将音乐训练与技能提升之间的单纯关联错误地描述为因果关系。这可能会让一些人感到惊讶。心理学家一直在对抗他们不做"真正"科学的指责——很大程度上是因为许多经典实验的发现被证明无法重现。另一方面,拥有脑扫描和脑电图的神经科学家并没有受到同样程度的批评。

- H) To argue for a cause-and-effect relationship, scientists must attempt to explain why and how a connection could occur. When it comes to transfer effects of music, scientists frequently point to brain plasticity—the fact that the brain changes according to how we use it. When a child learns to play the violin, for example, several studies have shown that the brain region responsible for the fine motor skills of the left hand's fingers is likely to grow. And many experiments have shown that musical training improves certain hearing capabilities, like filtering voices from background noise or distinguishing the difference between the consonants(辅音) 'b' and 'g'.

要论证因果关系,科学家必须尝试解释为什么以及如何产生联系。在涉及音乐的迁移效应时,科学家经常指出大脑可塑性——即大脑根据我们的使用方式而改变的事实。例如,当儿童学习拉小提琴时,几项研究表明,负责左手手指精细运动技能的大脑区域可能会增长。许多实验表明,音乐训练能提高某些听觉能力,如从背景噪音中过滤声音或区分辅音'b'和'g'之间的差异。

- I) But Schellenberg remains highly critical of how the concept of plasticity has been applied in his field. "Plasticity has become an industry of its own," he wrote in his May paper. Practice does change the brain, he allows, but what is questionable is the assertion that these changes affect other brain regions, such as those responsible for spatial reasoning or math problems.

但Schellenberg对可塑性概念在其领域的应用方式仍持高度批评态度。他在5月的论文中写道:"可塑性本身已经成为一个产业。"他承认,练习确实会改变大脑,但值得质疑的是这些变化会影响其他大脑区域的断言,如负责空间推理或数学问题的区域。

- J) Neuropsychologist Lutz Jancke agrees. "Most of these studies don't allow for causal inferences," he said. For over two decades, Jancke has researched the effects of music lessons, and like Schellenberg, he believes that the only way to truly understand their effects is to run longitudinal studies. In such studies, researchers would need to follow groups of children with and without music lessons over a long period of time—even if the assignments are not completely random. Then they could compare outcomes for each group.

神经心理学家Lutz Jancke对此表示赞同。"这些研究中的大多数不允许因果推断,"他说。二十多年来,Jancke一直在研究音乐课的效果,和Schellenberg一样,他认为真正了解其效果的唯一方法是进行纵向研究。在这类研究中,研究人员需要长期跟踪有音乐课和没有音乐课的儿童群体——即使分配不是完全随机的。然后他们可以比较每组的结果。

- K) Some researchers are starting to do just that. The neuroscientist Peter Schneider from Heidelberg University in Germany, for example, has been following a group of children for ten years now. Some of them were handed musical instruments and given lessons through a school-based program in the Ruhr region of Germany called Jedem Kind ein Instrument, or "an instrument for every child," which was carried out with government funding. Among these children, Schneider has found that those who

were enthusiastic about music and who practiced voluntarily showed improvements in hearing ability, as well as in more general competencies, such as the ability to concentrate.

一些研究人员正开始这样做。例如,德国海德堡大学的神经科学家Peter Schneider现在已经跟踪一组儿童十年了。其中一些儿童通过德国鲁尔地区一个名为Jedem Kind ein Instrument(即"每个孩子一件乐器")的学校项目获得了乐器并接受了课程,该项目由政府资助。在这些儿童中,Schneider发现那些对音乐充满热情并自愿练习的人在听觉能力以及更一般的能力方面都有所提高,如专注能力。

- L) To establish whether effects such as improved concentration are caused by music participation itself, and not by investing time in an extracurricular activity of any kind, Assal Habibi, a psychology professor at the University of Southern California, is conducting a five-year longitudinal study with children from low-income communities in Los Angeles. The youngsters fall into three groups: those who take after-school music, those who do after-school sports, and those with no structured after-school program at all. After two years, Habibi and her colleagues reported seeing structural changes in the brains of the musically trained children, both locally and in the pathways connecting different parts of the brain.

为了确定诸如注意力提高等效果是由音乐参与本身引起的,而不是由投入时间参与任何类型的课外活动引起的,南加州大学心理学教授Assal Habibi正在对洛杉矶低收入社区的儿童进行为期五年的纵向研究。这些孩子分为三组:参加课后音乐活动的、参加课后体育活动的,以及完全没有结构化课后项目的。两年后,Habibi和她的同事报告称,在接受音乐训练的儿童大脑中看到了结构变化,无论是局部还是在连接大脑不同部分的通路中。

- M) That may seem compelling, but Habibi's children were not selected randomly. Did the children who were drawn to music perhaps have something in them from the start that made them different but eluded the brain scanners? "As somebody who started taking piano lessons at the age of five and got up every morning at seven to practice, that experience changed me and made me part of who I am today," Schellenberg said. "The question is whether those kinds of experiences do so systematically across individuals and create exactly the same changes. And I think that is that huge leap of faith."

这似乎很有说服力,但Habibi的儿童不是随机选择的。被音乐吸引的孩子是否从一开始就拥有某些使她们与众不同但脑扫描仪无法捕捉到的东西?Schellenberg说:"作为一个从五岁开始上钢琴课并每天早上七点起床练习的人,那段经历改变了我,使我成为今天的一部分。问题是这类经历是否在个体之间系统性地产生同样的变化。我认为这是一个巨大的信念飞跃。

- N) Did he have a hidden talent that others didn't have? Or more endurance than his peers? Music researchers tend, like Schellenberg, to be musicians themselves, and as he noted in his recent paper, "the idea of positive cognitive and neural side effects from music training (and other pleasurable activities) is inherently appealing." He also admits that if he had children of his own, he would encourage them to take music lessons and go to university. "I would think that it makes them better people, more critical, just wiser in general," he said.

他是否拥有别人没有的隐藏天赋?或者比同龄人更有耐力?音乐研究者往往像Schellenberg一样,本身就是音乐家,正如他在最近的论文中指出的那样,"音乐训练(和其他愉快活动)产生积极认知和神经副作用的想法本质上具有吸引力。"他也承认,如果他有自己的孩子,他会鼓励他们上音乐课和上大学。他说:"我会认为这让他们成为更好的人,更有批判性,总体上更明智。

O) But those convictions should be checked at the entrance to the lab, he added. Otherwise, the work becomes religion or faith. "You have to let go of your faith if you want to be a scientist."

但他补充说,这些信念应该在实验室门口被搁置。否则,工作就变成了宗教或信仰。"如果你想成为科学家,就必须放下你的信念。

陈述句与逐句解析

36. Glenn Schellenberg's latest research suggests many psychologists and neuroscientists wrongly believe in the causal relationship between music and IQ.

Glenn Schellenberg的最新研究表明,许多心理学家和神经科学家错误地相信音乐与智商之间存在因果关系。

【答案】 E 段 (强锚点)

【锚点】 强锚: latest research + wrongly believe causal

【定位】 Recently, he decided to formally investigate just how often his fellow researchers in psychology and neuroscience make what he believes are erroneous—or at least premature—causal connections between music and intelligence. His results, published in May, suggest that many of his peers do just that.

最近,他决定正式调查一下他在心理学和神经科学领域的同行们,多频繁地做出他认为是错误的——或者至少是过早的——关于音乐与智力之间的因果关联。他5月发表的结果表明,他的许多同行的确如此。

【改写】 Glenn Schellenberg's latest research ↔ Recently, he decided to formally investigate

时间副词 + 行为动词改写

wrongly believe in the causal relationship between music and IQ ↔

erroneous—or at least premature—causal connections between music and intelligence

同义词替换 + 范围保留

many psychologists and neuroscientists ↔

his fellow researchers in psychology and neuroscience

同义短语改写

【辨邻】 G 段 the majority of the articles erroneously claimed that music training had a causal effect 虽然也讲「错称因果」,但题干36强调的是「Schellenberg的最新研究表明 + 同行错信」这一整体判断,落点在E段的His results, published in May, suggest that many of his peers do just that 上。

the majority of the articles erroneously claimed that music training had a causal effect

37. The belief in the positive effects of music training appeals to many researchers who are musicians themselves.

对音乐训练积极效果的信念吸引了许多本身就是音乐家的研究人员。

【答案】 N 段 (强锚点)

【锚点】强锚·researchers who are musicians themselves

【定位】Music researchers tend, like Schellenberg, to be musicians themselves, and as he noted in his recent paper, "the idea of positive cognitive and neural side effects from music training (and other pleasurable activities) is inherently appealing."

音乐研究者们和 Schellenberg 一样，往往自己就是音乐家；正如他在最近的论文里所写：「音乐训练（以及其他令人愉悦的活动）带来正向认知与神经副作用的想法，本身就很有吸引力。」

【改写】The belief in the positive effects of music training ↔

the idea of positive cognitive and neural side effects from music training

近义词替换 + 概括

appeals to many researchers who are musicians themselves ↔

Music researchers tend, like Schellenberg, to be musicians themselves is inherently appealing

主被动转换 + 同源词替换

【辨邻】D D 段 as a passionate musician, Schellenberg was delighted when he turned up credible evidence 是描述他作为音乐家时的个人情绪反应，而非题干的『许多本身是音乐家的研究者被这种正向看法所吸引』。

as a passionate musician, Schellenberg was delighted when he turned up credible evidence

38. Glenn Schellenberg was doubtful about the claim that music education helps enhance children's intelligence.

Glenn Schellenberg对音乐教育有助于提高儿童智力的说法持怀疑态度。

【答案】C 段（强锚点）

【锚点】强锚·doubtful + claim that music education helps enhance children's intelligence

【定位】Schellenberg had long been skeptical of the science supporting claims that music education enhances children's abstract reasoning, math, or language skills.

Schellenberg 长久以来一直对那些声称音乐教育能提升儿童抽象推理、数学或语言能力的说法所依赖的科学持怀疑态度。

【改写】was doubtful about the claim ↔ **had long been skeptical of the science supporting claims**

近义形容词替换

music education helps enhance children's intelligence ↔

music education enhances children's abstract reasoning, math, or language skills

上位词总称 ↔ 下位词枚举

【辨邻】I I 段 Schellenberg remains highly critical of how the concept of plasticity has been applied in his field 的怀疑对象是脑可塑性的应用方式，而题干 38 的怀疑对象是「音乐教育能否提升儿童智力」这一更宽泛的命题，范围不同。

Schellenberg remains highly critical of how the concept of plasticity has been applied in his field

39. Glenn Schellenberg came to the conclusion that most of the papers assessed made the wrong claim regarding music's effect on intelligence.

Glenn Schellenberg得出结论，大多数被评估的论文在音乐对智力的影响方面做出了错误的声明。

【答案】 G 段 (强锚点)

【锚点】 强锚: most of the papers + wrong claim

【定位】 After computing their assessments, Schellenberg concluded that the majority of the articles erroneously claimed that music training had a causal effect.

在汇总助手们的评估之后，Schellenberg 得出结论：大多数论文错误地宣称音乐训练具有因果效应。

【改写】 most of the papers assessed ↔ the majority of the articles

近义词替换

made the wrong claim regarding music's effect on intelligence ↔

erroneously claimed that music training had a causal effect

名词短语 ↔ 副词 + 动词 + 因果改写

【辨邻】 E E 段 many of his peers do just that 是『许多同行』的程度词，而题干 39 用的是『大多数论文 (most of the papers)』这种量化判决，应当对到 G 段更精确的 majority 表述。

His results, published in May, suggest that many of his peers do just that

40. You must abandon your unverified beliefs before you become a scientist.

在你成为科学家之前，你必须放弃未经证实的信念。

【答案】 O 段 (强锚点)

【锚点】 强锚: abandon unverified beliefs + become a scientist

【定位】 But those convictions should be checked at the entrance to the lab, he added. Otherwise, the work becomes religion or faith. "You have to let go of your faith if you want to be a scientist."

但他补充说，那些信念应该在走进实验室时就被搁置；否则，研究就会沦为宗教或信仰。

「如果你想成为一名科学家，就必须放下你的信念。」

【改写】 You must abandon your unverified beliefs ↔ You have to let go of your faith

情态动词 + 动词短语同义替换

before you become a scientist ↔ if you want to be a scientist

条件状语句式转换

41. Lots of experiments have demonstrated that people with music training can better differentiate certain sounds.

大量实验已经证明，接受过音乐训练的人能够更好地区分某些声音。

【答案】 **H** 段 (强锚点)

【锚点】 强锚: music training + differentiate certain sounds

【定位】 And many experiments have shown that musical training improves certain hearing capabilities, like filtering voices from background noise or distinguishing the difference between the consonants(辅音) 'b' and 'g'.

并且许多实验已经表明，音乐训练能提升某些听觉能力，比如从背景噪声中过滤人声，或区分辅音 b 和 g 之间的差异。

【改写】 Lots of experiments have demonstrated ↔ many experiments have shown

数量词 + 动词同义替换

people with music training can better differentiate certain sounds ↔

musical training improves certain hearing capabilities, like ... distinguishing the difference between the consonants(辅音) 'b' and 'g'

上位概括 + 同义动作 + 例证还原

【辨邻】 **K** 段 improvements in hearing ability, as well as in more general competencies, such as the ability to concentrate 是一项追踪研究的整体发现，并未提到『区分某些声音』这种具体辨别动作；这正是 H 段独有的细节。

improvements in hearing ability, as well as in more general competencies, such as the ability to concentrate

42. Glenn Schellenberg's findings at the beginning of this century were not supported by a larger study carried out some ten years later.

Glenn Schellenberg 在本世纪初的研究结果未能得到大约十年后进行的一项更大规模研究的支持。

【答案】 **D** 段 (强锚点)

【锚点】 强锚: beginning of this century + larger study ten years later

【定位】 But nearly a decade later, in 2013, the Education Endowment Foundation funded a bigger study with more than 900 students. That study failed to confirm Schellenberg's findings, producing no evidence that music lessons improved math and literacy skills.

但将近十年后，在 2013 年，Education Endowment Foundation 资助了一项更大规模的研究，受试者超过 900 名学生。那项研究未能证实 Schellenberg 的发现，没能拿出证据表明音乐课提升了数学和读写能力。

【改写】 Glenn Schellenberg's findings at the beginning of this century ↔

The 2004 paper was specifically designed to address those concerns

时间状语的上位概括

were not supported by a larger study carried out some ten years later ↔

nearly a decade later, in 2013, the Education Endowment Foundation funded a bigger study with more than 900 students

时间表达 + 形容词近义替换

were not supported by a larger study ↔ **That study failed to confirm Schellenberg's findings**

否定结构同义替换

【辨邻】 B B 段 The IQ of the children in the two musical groups rose by an average of seven points 描述的是 2004 实验的正面结果，并未提及十年后大研究是否支持；题干 42 的关键事件是『未被支持』，应落在 D 段。

The IQ of the children in the two musical groups rose by an average of seven points in the course of a year

43. One researcher shares Glenn Schellenberg's view that it is necessary to conduct long-term developmental studies to understand the effects of music training.

一位研究人员认同 Glenn Schellenberg 的观点，即有必要进行长期发展性研究以了解音乐训练的效果。

【答案】 J 段（强锚点）

【锚点】 强锚 One researcher shares + long-term developmental studies

【定位】 Neuropsychologist Lutz Jancke agrees. "Most of these studies don't allow for causal inferences," he said. For over two decades, Jancke has researched the effects of music lessons, and like Schellenberg, he believes that the only way to truly understand their effects is to run longitudinal studies.

神经心理学家 Lutz Jancke 表示同意。「这些研究大多无法支持因果推断，」他说。二十多年来，Jancke 一直在研究音乐课的效果，并且和 Schellenberg 一样，他认为真正理解其效果的唯一办法是做纵向研究。

【改写】 One researcher shares Glenn Schellenberg's view ↔ **Neuropsychologist Lutz Jancke agrees**

动词同义替换 + 模糊化指代

it is necessary to conduct long-term developmental studies to understand the effects of music training

↔ **the only way to truly understand their effects is to run longitudinal studies**

专业术语 ↔ 通俗描述

【辨邻】 K 段 Some researchers are starting to do just that 是承接 J 段后举出『正在做的人』，而题干 43 的关键是『有研究者赞同他 + 主张这种方法必要』，落点在 J 段 Jancke 的表态。

Some researchers are starting to do just that

44. Glenn Schellenberg's research assistants had no idea what he was trying to prove in his new study.

Glenn Schellenberg 的研究助理不知道他在新研究中试图证明什么。

【答案】 F 段 (强锚点)

【锚点】 强锚·research assistants + no idea what he was trying to prove

【定位】 Schellenberg didn't tell his assistants what exactly he was trying to prove.
Schellenberg 没有告诉他的助手们他究竟想证明什么。

【改写】 Glenn Schellenberg's research assistants had no idea ↔ Schellenberg didn't tell his assistants
因果改写

what he was trying to prove in his new study ↔ what exactly he was trying to prove
宾语从句直接对应

45. Glenn Schellenberg admits that practice can change certain areas of the brain but doubts that the change can affect other areas.

Glenn Schellenberg 承认练习可以改变大脑的某些区域，但怀疑这种变化能否影响其他区域。

【答案】 I 段 (强锚点)

【锚点】 强锚·practice can change certain areas + doubts other areas

【定位】 Practice does change the brain, he allows, but what is questionable is the assertion that these changes affect other brain regions, such as those responsible for spatial reasoning or math problems.

他承认，练习确实能改变大脑；但他认为可疑的是那种断言——这些改变会影响到其他脑区，比如负责空间推理或数学问题的脑区。

【改写】 admits that practice can change certain areas of the brain ↔

Practice does change the brain, he allows

让步动词同义替换

doubts that the change can affect other areas ↔

what is questionable is the assertion that these changes affect other brain regions, such as those responsible for spatial reasoning or math problems

动词 ↔ 名词化改写

【辨邻】 H 段 scientists frequently point to brain plasticity—the fact that the brain changes according to how we use it 描述的是科学家如何为因果辩护，并未出现『但是 + 怀疑跨区影响』这种让步—转折；题干 45 的双层结构只在 I 段完整呈现。

scientists frequently point to brain plasticity—the fact that the brain changes according to how we use it

PARAGRAPH MAP • 段落主旨图

15 个段落各讲了什么

逐段一句主旨 + 该段最具区分度的「信息指纹」，是逐句回扫定位的工作台。

A 开篇引子段：点出全文将要呈现的总观点——一项近期分析发现，大多数关于音乐与能力提升的研究在因果关系上存在表述偏差。

信息指纹 总纲句·研究表述偏差

B 回顾 2004 年那篇标题为「音乐课提升智商」的论文：Schellenberg 把 144 个孩子随机分进键盘、声乐、戏剧、对照四组，发现两个音乐组的智商平均涨了 7 分，另外两组涨 4.3 分。

信息指纹 具象·2004 实验与四组分配

C 交代 Schellenberg 长期以来对「音乐教育能提升孩子抽象推理、数学、语言能力」这一说法持怀疑态度，强调相关不等于因果。

信息指纹 态度·长期怀疑

D 2004 年那篇论文本是为了回应这些质疑，并一度让他作为音乐爱好者欣慰；但 2013 年由 Education Endowment Foundation 资助的、900 多名学生的更大规模研究并未支持他的结论。

信息指纹 反转·2013 大样本未复现

E Schellenberg 平静接受这个消息，转而正式调查同行心理学家与神经科学家有多频繁地做出错误或仓促的「音乐—智商」因果判断；他 5 月发表的研究结果显示，确实有许多同行如此。

信息指纹 新研究·调查同行误判频率

F 介绍新研究的具体做法：让两位助手收集自 2000 年以来 114 篇相关论文，看摘要标题里有没有「enhance/promote/facilitate/strengthen」这种暗示因果的动词，并按是否用脑成像归入神经科学或心理学；他没告诉助手自己想证明什么。

信息指纹 方法·114 篇 + 关键词 + 助手盲评

G 公布新研究的核心结论：大多数论文都错误地宣称音乐训练具有因果效应；神经科学论文里这种「过度推销」尤其严重，四分之三把单纯的相关说成因果；并附带指出心理学和神经科学过去受到的批评程度不同。

信息指纹 结论·多数论文错称因果，神经科学更严重

H 讲科学家如何论证因果：常借助「大脑可塑性」概念，举例小提琴训练会让左手手指运动相关脑区生长，多项实验显示音乐训练能改善某些听觉能力，如从背景噪声中过滤人声、区分辅音 b 和 g。

信息指纹 机制·脑可塑性与听觉辨别例证

I Schellenberg 对脑可塑性在该领域的应用提出严厉批评：练习确实能改变大脑，但「这些改变会影响其他脑区（如空间推理、数学）」这一断言才是可疑之处。

信息指纹 反驳·承认局部改变但质疑跨区迁移

J 神经心理学家 Lutz Jancke 同意 Schellenberg 的看法：现有研究多数无法支持因果推断，要真正理解音乐课的效果，必须做纵向（longitudinal）研究——长期追踪有无音乐课的孩子群体，再比较结果。

信息指纹 盟友·Jancke 主张做纵向研究

K 举一项正在做的纵向研究：海德堡大学 Peter Schneider 跟踪一群孩子十年，部分孩子参与德国鲁尔区的「每个孩子一件乐器」项目；其中那些真心热爱并自愿练习的孩子，在听觉能力和注意力等更普遍能力上都有提升。

信息指纹 实例·Schneider 十年追踪 + 鲁尔区项目

L 另一项正在做的纵向研究：南加州大学 Assal Habibi 用洛杉矶低收入社区的孩子，分音乐组、体育组、无课后项目组三组对照，两年后报告音乐组孩子大脑出现结构性变化。

信息指纹 实例·Habibi 三组对照纵向研究

M 对 Habibi 研究泼冷水：她的孩子不是随机选的，那些被音乐吸引的孩子或许本就有某种与众不同的特质；Schellenberg 用自己 5 岁起每天 7 点起床练琴的经历举例，质疑这种经历是否能在所有人身上系统地产生同样的改变。

信息指纹 再质疑·非随机 + 个人经历类比

N 顺着上段反思：音乐研究者大多自己就是音乐家（Schellenberg 也是），他在新论文里写道「音乐训练（和其他愉悦活动）带来正向认知与神经副作用的想法本身就很有吸引力」；他也承认若自己有孩子也会鼓励他们学音乐和上大学。

信息指纹 自省·研究者多为音乐家这一吸引力偏差

O 结尾告诫：但那些信念应该在走进实验室时就被搁置，否则研究就变成宗教或信仰；想做科学家就必须放下自己的信仰。

信息指纹 结论·进实验室前先放下信念

SENTENCE INSIGHTS • 句子精讲

15 句真题句逐层精讲

下列真题句各有独立的句子解析页——中文翻译、结构树逐层拆解、成分与时态、考点讲解与真题高频词。点击句子进入完整解析。

Correlation, after all, does not prove causation.

C段，第4句

简单句结构本身常见，插入语的使用也是书面语中的典型手法，但整句过于简洁，不涉及考试中高频出现的从句、非谓语、特殊句式等结构，作为句式代表性处于中等水平。

The 2004 paper was specifically designed to address those concerns.

D段，第1句

被动语态 + 不定式目的状语是学术和考试文本中的常见结构，尤其在描述研究设计或结果时频繁出现，具有一定代表性和迁移价值。

And as a passionate musician, Schellenberg was delighted when he turned up credible evidence that music has transfer effects on general intelligence.

D段，第2句

本句结构非常典型:主句 + 时间状语从句 + 同位语从句,是四六级和考研阅读中高频出现的句式。同位语从句用于解释抽象名词(如 evidence、fact、idea 等)的具体内容,是学术文本和科普文章的常见表达方式。时间状语从句的嵌入也是复合句的基本模式。掌握这个句式后,学习者可以迁移到大量类似结构的句子,代表性很强。

Recently, he decided to formally investigate just how often his fellow researchers in psychology and neuroscience make what he believes are erroneous—or at least premature—causal connections between music and intelligence.

E段，第2句

句子覆盖主谓宾、时间状语、系表结构、嵌套宾语从句、插入语等多种成分，且 "what" 从句中 "what" 既作引导词又作主语，是易错点。第一层从句中 "how often" 作状语也需要辨析。破折号内的补充说明和介词短语后置定语进一步丰富成分种类。作为划分成分的练习句，覆盖面广且有一定挑战性。

Otherwise the papers were categorized as psychology.

F段，第5句

一般过去时被动语态的简单句在学术写作和考试阅读中较为常见，"categorize as" 搭配也是典型表达，但句式过于简单，缺乏从句或复杂修饰，代表性中等。

The overselling, he also found, was more prevalent among neuroscience studies, three quarters of which mischaracterized a mere association between music training and skills enhancement as a cause-and-effect relationship.

G段，第2句

本句包含非限定性定语从句、插入语、主系表结构、宾语补足语等多个四六级和考研高频考点,尤其 "three quarters of which" 和 "mischaracterize A as B" 都是真题中反复出现的典型结构,学习迁移价值高

Neuroscientists, on the other hand, armed with brain scans and EEGs(脑电图), have not been subject to the same degree of critique.

G段，第5句

本句的结构（主系表 + 后置定语 + 插入语 + 现在完成时）在四六级和考研阅读中较为常见，尤其是后置定语修饰主语、系动词后接形容词性表语的用法是高频句式，掌握后可迁移到大量类似句子的分析中。典型性较高。

Practice does change the brain, he allows, but what is questionable is the assertion that these changes affect other brain regions, such as those responsible for spatial reasoning or math problems.

I段，第3句

覆盖主语从句、同位语从句、定语从句、主系表结构、插入语等多种成分类型，且同位语从句与定语从句的区分、what 引导的主语从句、插入语的识别都是常见易错点，训练价值高。

Some of them were handed musical instruments and given lessons through a school-based program in the Ruhr region of Germany called Jedem Kind ein Instrument, or "an instrument for every child," which was carried out with government funding.

K段，第3句

句子使用被动语态 + 并列谓语 + 非限制性定语从句的组合，这是四六级和考研阅读中常见的句式结构。被动语态和定语从句的搭配具有较强代表性，掌握后可在大量类似句子中复用，典型性较高。

Among these children, Schneider has found that those who were enthusiastic about music and who practiced voluntarily showed improvements in hearing ability, as well as in more general competencies, such as the ability to concentrate.

K段，第4句

主句加宾语从句、宾语从句主语带并列定语从句修饰,是四六级和考研阅读中非常典型的学术报道句式,这种 发现类动词加 that 从句、从句主语带定语从句限定的结构在真题中反复出现,掌握后可迁移到大量类似句子

"The question is whether those kinds of experiences do so systematically across individuals and create exactly the same changes. And I think that is that huge leap of faith."

M段，第4句

本句展示了常见的并列主句结构和名词性从句（表语从句、宾语从句）用法，这两类结构在四六级和考研真题中频繁出现。"whether"引导的表语从句表达疑问内容，"that"引导的宾语从句表达观点，都是典型的学术或议论文表达方式。掌握这些句式后可大量迁移到阅读和写作中。

He also admits that if he had children of his own, he would encourage them to take music lessons and go to university.

N段，第4句

本句的结构非常典型：主句 + 宾语从句是四六级和考研常考句式，宾语从句内嵌套条件状语从句也是高频结构。虚拟条件句（if 从句用过去时，主句用 would）是语法重点。admit that、encourage sb to do sth 都是常考搭配，掌握后可大量复用

Otherwise, the work becomes religion or faith.

O段，第2句

主系表结构和句首状语都是四六级和考研常见句式，"Otherwise" 引导的逻辑转折也具有一定代表性，但整体过于简单，缺乏从句或复杂修饰成分，作为典型句式的迁移价值居中

Glenn Schellenberg's findings at the beginning of this century were not supported by a larger study carried out some ten years later.

第42题题干

被动语态+by短语+后置定语从句(过去分词形式)的组合,是学术和考试文本中的高频句式。该结构常用于陈述研究结果和文献对比,具有较高的复用价值,掌握后可迁移到大量同类句子。

One researcher shares Glenn Schellenberg's view that it is necessary to conduct long-term developmental studies to understand the effects of music training.

第43题题干

同位语从句修饰抽象名词加不定式复合结构是学术写作和考试阅读中的常见句式,具有较高的代表性和迁移价值。

本篇出现的 129 个英语六级真题高频词

下列单词既在本篇真题中出现，又是 **英语六级** 历年真题的高频词（在该考试真题中出现的句子数均不少于 8）。每个词标注本篇 出现次数与该考试真题句频，点击可查看该词的释义、音标、词形与真题例句。

effect A2

n. 影响

本篇11次 · 真题 191 句

researcher B2

n. 研究人员

本篇7次 · 真题 363 句

claim B1

v. 声称

本篇5次 · 真题 111 句

relationship B1

n. 关系

本篇4次 · 真题 168 句

intelligence B2

n. 智力

本篇4次 · 真题 64 句

enhance B2

v. 提高

本篇4次 · 真题 32 句

neuroscience C1

n. 神经科学

本篇4次 · 真题 19 句

causal C1

adj. 因果关系的

本篇4次 · 真题 9 句

would A1

aux. (will 的过去式) 将要，会

本篇3次 · 真题 568 句

better A1

adj. 更好的 (good 的比较级)

本篇3次 · 真题 205 句

finding B2

n. 调查结果

本篇3次 · 真题 121 句

region B1

n. 地区

本篇3次 · 真题 78 句

conduct B2

v. 组织并实施

本篇3次 · 真题 59 句

psychologist B2

n. 心理学家

本篇3次 · 真题 54 句

psychology B2

n. 心理学

本篇3次·真题 52 句

musician A2

n. 音乐家;演奏者

本篇3次·真题 21 句

assistant A2

n. 助手

本篇3次·真题 16 句

faith B1

n. 信任

本篇3次·真题 11 句

neuroscientist C1

n. 神经科学家

本篇3次·真题 10 句

musical B1

adj. 音乐的

本篇3次·真题 9 句

author A2

n. 作者

本篇2次·真题 264 句

positive B1

adj. 积极的

本篇2次·真题 144 句

decade B1

n. 十年

本篇2次·真题 120 句

affect B1

v. 影响

本篇2次·真题 116 句

average A2

adj. 平均的

本篇2次·真题 112 句

support A2

v. 支持

本篇2次·真题 103 句

publish B1

v. 出版, 发行 (书籍、杂志等)

本篇2次·真题 94 句

evidence B1

n. 证据

本篇2次·真题 87 句

later A1

adv. 以后, later

本篇2次·真题 87 句

belief B1

n. 相信

本篇2次·真题 85 句

journal B1

n. 杂志

本篇2次·真题 66 句

peer B2

n. 同龄人

本篇2次·真题 62 句

connection B1

n. 联系

本篇2次·真题 50 句

exactly B1

adv. 精确地

本篇2次·真题 46 句

critical B2

adj. 批评的

本篇2次·真题 42 句

responsible B1

adj. 负责的

本篇2次·真题 40 句

otherwise B2

adv. 否则, 不然

本篇2次·真题 33 句

assess B2

v. 评估

本篇2次·真题 30 句

admit B1

v. 承认 (事实、错误等)

本篇2次·真题 22 句

transfer B1

v. 转移

本篇2次·真题 17 句

reasoning B2

n. 推理

本篇2次·真题 13 句

abstract B2

adj. 抽象的

本篇2次·真题 11 句

randomly B2

adv. 随机地

本篇2次·真题 10 句

extracurricular B2

adj. 课外的;课程以外的

本篇2次·真题 9 句

skeptical B2

adj. 怀疑的

本篇2次·真题 9 句

youngster B1

n. 年轻人

本篇2次·真题 9 句

likely B1

adj. 很可能的

本篇1次·真题 228 句

focus B1

n. 重点

本篇1次·真题 200 句

tend B1

v. 倾向于, 往往会

本篇1次·真题 170 句

community B1

n. 社区

本篇1次·真题 163 句

individual B2

adj. 单独的

本篇1次·真题 142 句

view A2

n. 观点, 看法

本篇1次·真题 134 句

design B1

n. 设计

本篇1次·真题 119 句

professor B1

n. 教授 (大学教师的最高职称)

本篇1次·真题 112 句

argue B1

v. 争论

本篇1次·真题 106 句

least A2

det. 最少的

本篇1次·真题 98 句

according B1

prep. 根据

本篇1次·真题 96 句

gain B1

v. 获得; 赢得

本篇1次·真题 96 句

concern B1

v. 涉及

本篇1次·真题 88 句

cognitive C1

adj. 认知的

本篇1次·真题 85 句

colleague B1

n. 同事

本篇1次·真题 84 句

promote B2

v. 促进

本篇1次·真题 82 句

recently A2

adv. 最近

本篇1次·真题 76 句

wrong A2

adj. 错误的

本篇1次·真题 66 句

apply A2

v. 申请

本篇1次·真题 63 句

occur B1

v. 发生, 出现

本篇1次·真题 62 句

concept B2

n. 概念

本篇1次·真题 59 句

majority B2

n. 大多数, 大部分

本篇1次·真题 51 句

analysis B2

n. 分析

本篇1次·真题 49 句

appeal B2

v. 呼吁

本篇1次·真题 48 句

demonstrate B2

v. 证明

本篇1次·真题 45 句

invest B2

v. 投资 (金钱、时间等以期获得回报)

本篇1次·真题 45 句

charge B1

v. 收费

本篇1次·真题 44 句

completely B1

adv. 完全地

本篇1次·真题 43 句

establish B2

v. 建立, 创立 (组织、机构、关系等)

本篇1次·真题 42 句

outcome B2

n. 结果

本篇1次·真题 40 句

attempt B1

v. 试图

本篇1次·真题 39 句

psychological B2

adj. 心理的

本篇1次·真题 39 句

related B1

adj. 相关的

本篇1次·真题 39 句

improvement B1

n. 改进

本篇1次·真题 36 句

talent B1

n. 天赋

本篇1次·真题 35 句

highly B1

adv. 非常

本篇1次·真题 34 句

funding B2

n. 资金

本篇1次·真题 32 句

frequently B1

adv. 频繁地

本篇1次·真题 31 句

association B2

n. 协会

本篇1次·真题 30 句

conclude B2

v. 断定;推断出

本篇1次·真题 30 句

employ B1

v. 雇用

本篇1次·真题 30 句

fund B2

n. 资金

本篇1次·真题 30 句

necessarily B2

adv. 必然地

本篇1次·真题 30 句

battle B1

n. 战斗

本篇1次·真题 29 句

truly B1

adv. 真正地

本篇1次·真题 28 句

strengthen B2

v. 加强

本篇1次·真题 27 句

beginning A1

n. 开始

本篇1次·真题 25 句

foundation B2

n. 基础;根基

本篇1次·真题 25 句

distinguish

B2

v. 区分

本篇1次·真题 23 句

select

B1

v. 选择, 挑选

本篇1次·真题 23 句

abandon

B2

v. 离弃

本篇1次·真题 22 句

assign

B1

v. 分配 (任务、工作)

本篇1次·真题 22 句

fellow

B2

n. 家伙

本篇1次·真题 22 句

correlation

C1

n. 相关性

本篇1次·真题 21 句

capability

B2

n. 能力

本篇1次·真题 20 句

mere

B2

adj. 仅仅的

本篇1次·真题 19 句

facilitate

C1

v. 促进

本篇1次·真题 18 句

investigate

B2

v. 调查

本篇1次·真题 18 句

specifically

B2

adv. 明确地

本篇1次·真题 18 句

hidden

B1

adj. 隐藏的

本篇1次·真题 16 句

assessment

B2

n. 评估

本篇1次·真题 14 句

concentrate

B1

v. 集中注意力

本篇1次·真题 14 句

confirm

B1

v. 证实

本篇1次·真题 14 句

literacy

B2

n. 读写能力

本篇1次·真题 14 句

passionate B2

adj. 热情的

本篇1次 · 真题 14 句

regarding B2

prep. 关于

本篇1次 · 真题 14 句

classic B1

adj. 典型的

本篇1次 · 真题 13 句

filter B1

n. 过滤器

本篇1次 · 真题 13 句

participation B2

n. 参与

本篇1次 · 真题 13 句

ambitious B2

adj. 有雄心的

本篇1次 · 真题 12 句

motor B1

n. 发动机

本篇1次 · 真题 12 句

prevalent C1

adj. 普遍的

本篇1次 · 真题 12 句

random B2

adj. 随机的

本篇1次 · 真题 12 句

self B1

n. 自我

本篇1次 · 真题 12 句

structural B2

adj. 结构的

本篇1次 · 真题 12 句

concentration B2

n. 专注

本篇1次 · 真题 11 句

appealing B2

adj. 有吸引力的

本篇1次 · 真题 10 句

inherently C1

adv. 内在地

本篇1次 · 真题 10 句

cast B2

v. 投掷

本篇1次 · 真题 9 句

religion B1

n. 宗教

本篇1次 · 真题 9 句

scan B1

v. 仔细查看、审视

本篇1次·真题9句

assignment B1

n. (学校的) 作业、任务

本篇1次·真题8句

enthusiastic B2

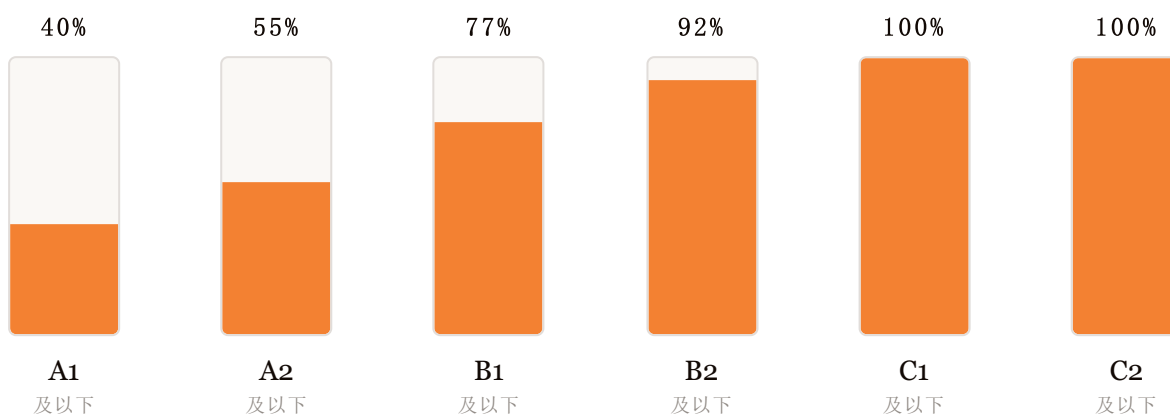
adj. 热情的

本篇1次·真题8句

VOCABULARY · 词汇难度分布

全文 405 词按 CEFR 难度累积覆盖

全文去重后共 **405** 个单词，按欧框 CEFR 等级统计。每根柱表示「该等级及以下」的累积占比（CDF），最右一柱为 100%。B2 以上（C1/C2）为高阶词，本篇共 33 个·约 8%。



每柱为「按 CEFR 等级及以下」的累积覆盖率（CDF）·数据为全文去重词 405 个·末柱为 100%

去重总词数

405

B2 以上难词

8%

B1 及以下覆盖

77%

英语六级 2021年12月·第2套 · 全卷构成

Part I	写作	题目解析 →
Part II	听力	题目解析 →
Part III Section A	完形填空（选词填空）	题目解析 →
Part III Section B	长篇阅读（信息匹配）	本题
Part III Section C (1)	阅读理解（四选一）	题目解析 →
Part III Section C (2)	阅读理解（四选一）	题目解析 →
Part IV	汉译英（段落翻译）	题目解析 →