



PART 2

Read the text below and answer questions 14–26.

THE COGNITIVE BENEFITS OF BILINGUALISM

A

Bilingualism is the global norm rather than an exception, yet for much of the twentieth century it was often framed in policy debates as an educational complication, associated—sometimes wrongly—with confusion or delayed development. Contemporary research has largely abandoned that deficit model and instead asks whether managing two languages influences cognition beyond communication. Importantly, the strongest claims are not about higher IQ or a general boost in intelligence, but about differences in how attention is regulated when competing information must be managed. In this literature, “benefit” is a contested term: some authors prefer “bilingual differences” because an observed divergence in performance may reflect alternative strategies rather than superiority. The debate also hinges on what counts as cognition in the first place. Laboratory measures typically target executive function—processes such as inhibitory control, conflict monitoring, and cognitive flexibility—because bilingual speakers must routinely keep one language accessible while preventing the other from intruding inappropriately. The core question is therefore not whether bilinguals are smarter overall, but whether their everyday linguistic experience reshapes control systems that have broader applications.

B

A prominent mechanistic account begins with language co-activation. Psycholinguistic studies suggest that when bilinguals listen, read, or prepare to speak, both languages can be partially activated, even when only one is intended. That co-activation creates potential interference: a word in one language may compete with a similar-sounding or semantically related word in the other, and the speaker must select the target item while suppressing alternatives. On this view, bilingualism acts as long-term practice in inhibitory control. The repeated need to resolve competition—choosing one linguistic response and inhibiting the non-target language—could strengthen components of executive function, including task switching and the ability to ignore distractors. Some accounts further propose that the brain’s control circuitry becomes more efficient through neuroplasticity, as the dorsolateral prefrontal cortex and related networks are recruited over years of regulation. However, even within this framework, the training analogy is not straightforward. Language control is embedded in rich social contexts, and its demands may differ from those in abstract laboratory tasks. The mechanism is therefore plausible, but it does not guarantee a uniform behavioural advantage across all situations.



C

Empirical evidence has often been drawn from controlled tasks designed to elicit interference and measure how quickly and accurately participants resolve it. The Stroop task, for example, requires naming the ink colour of a word while ignoring the word's meaning, and the Flanker task requires responding to a central stimulus while distracting flankers pull attention in a competing direction. Some studies report that bilinguals show smaller interference effects—faster reaction times or fewer errors—suggesting enhanced conflict monitoring or inhibition. Yet the findings are heterogeneous. Differences appear in some samples and tasks but not others, and effects can vary with age, testing language, and the complexity of the experimental design. A major reason is that bilingualism is not a single, uniform exposure. Age of acquisition, proficiency balance, frequency of use, and patterns of switching between languages differ markedly between individuals. A bilingual who uses both languages daily in mixed contexts may face more constant competition than someone who uses one language at home and another only occasionally. Consequently, researchers increasingly argue that studies must measure bilingual experience with greater precision rather than treating it as a binary label.

D

Critiques of the “bilingual advantage” thesis often focus on methodology and confounding variables. Bilingual and monolingual groups can differ systematically in socioeconomic status (SES), education level, immigration history, cultural norms, and even familiarity with test-taking, all of which may influence performance on cognitive tasks. If such factors are not carefully matched or statistically controlled, apparent cognitive differences may be misattributed to language status. Another concern is publication bias, sometimes described as the file-drawer problem: studies reporting null results may be less likely to be published, while positive findings receive disproportionate attention. Over time, this selective visibility can inflate the perceived consistency and size of any advantage. Meta-analyses that aggregate results across studies have therefore produced mixed conclusions, with some reporting small effects and others emphasising inconsistency across tasks and populations. In response, many researchers now call for larger samples, preregistration of hypotheses, open data practices, and multi-site replication so that results are less vulnerable to chance findings and selective reporting.

E

Partly because of these critiques, the field has shifted toward a conditional account. Rather than asking whether there is a single, general advantage, researchers increasingly propose that bilingualism may confer benefits under specific task demands and at particular points in the lifespan. The logic is that effects should be most visible when tasks heavily tax conflict monitoring or rapid switching, and weakest when tasks do not



meaningfully engage control mechanisms. This approach also predicts developmental variation. In young children, executive systems are still maturing, so bilingual experience might shape trajectories of control; in older adults, control systems may be under greater strain, so any protective differences may be easier to detect. A conditional account therefore expects variability rather than a universal effect, and it treats null results not as failures but as informative signals about boundary conditions. It also reframes the debate: the question becomes “when and for whom do differences emerge?” rather than “does bilingualism always help?”

F

The most publicised claims concern ageing and dementia, where several observational studies have reported that bilinguals are diagnosed with dementia symptoms later than comparable monolinguals. A common interpretation invokes the cognitive reserve hypothesis: lifelong mental activity may strengthen compensatory networks so that clinical symptoms manifest later even when underlying pathology is present. In this framing, bilingual language management is one contributor to reserve, alongside education, occupational complexity, and social engagement. Yet the evidence remains contested because observational designs cannot easily separate cause from correlation. Bilingual populations may differ in lifestyle, migration patterns, healthcare access, and educational history, and these factors could influence diagnosis timing independently. Neuroscience findings add detail without decisively resolving the debate. Imaging studies sometimes report differences in white matter integrity or in networks associated with attention and control, and some work highlights structural variation in regions involved in executive processing. However, such neural differences are heterogeneous and do not automatically translate into better everyday functioning. Many researchers therefore interpret brain evidence as suggestive of adaptation to experience rather than as definitive proof of superior cognition.

G

Education and public communication often miss this nuance. When bilingualism is marketed as a guaranteed cognitive enhancement, mixed findings can trigger backlash and oversimplified conclusions that “the advantage is a myth.” A more defensible message is that bilingualism is valuable regardless of cognitive debates: it expands communication, supports identity, and can provide economic and social opportunities. At the same time, bilingual experience may shape certain control processes, but the size and reliability of any effects depend on how bilingualism is defined and measured, and on what a task demands. Current research is therefore moving toward more rigorous designs: large, diverse samples; careful matching on SES and education; preregistration to reduce analytic flexibility; and measures that capture real language use rather than relying only on



self-labels. The emerging picture is neither miracle nor mirage: bilingualism can influence cognition, but claims must be calibrated to the evidence and to the complexity of bilingual lives.

Questions 14–18

Choose the correct heading for each paragraph.

List of Headings

- i A conditional view linking effects to task demands and life stage
- ii How confounding factors and selective publication can skew findings
- iii Clarifying what researchers mean by “benefit” in this debate
- iv Experimental tasks and the reasons results vary across bilingual groups
- v A mechanism based on selection and suppression during language use
- vi Cognitive reserve and the uncertain evidence concerning dementia
- vii Why neural adaptation may not improve everyday functioning
- viii The value of bilingualism beyond possible cognitive effects
- ix Methodological reforms intended to strengthen future research

14 Paragraph A

15 Paragraph B

16 Paragraph C

17 Paragraph D

18 Paragraph E

Questions 19–23

Choose **TRUE** if the statement agrees with the information given in the text, choose **FALSE** if the statement contradicts the information, or choose **NOT GIVEN** if there is no information on this.

19 The passage suggests that bilingualism is best understood as affecting executive control rather than overall intelligence.

20 The passage reports that bilingual performance advantages have been found consistently across different samples and tasks.

21 The passage claims that publication bias could make bilingual advantages appear larger than they really are.



22 The passage treats later dementia diagnosis among bilinguals as firm evidence of a protective causal effect.

23 The passage provides the percentage of recent bilingualism studies that use preregistration.

Questions 24–26

Complete the summary below. Choose **NO MORE THAN TWO WORDS** from the text for each answer.

How bilingual experience may affect cognition

Some researchers argue that bilinguals practise selecting the intended language while suppressing interference, which may strengthen aspects of **24** However, results vary because bilingual experience differs in factors such as proficiency and frequency of **25** In later life, delayed dementia diagnosis is sometimes explained by increased **26**, although the passage notes that observational evidence cannot fully separate causes from correlations.

Answer Key

14. iii

15. v

16. iv

17. ii

18. i

19. TRUE

20. FALSE

21. TRUE

22. FALSE

23. NOT GIVEN

24. executive function

25. use

26. cognitive reserve