

Exercise walk-through

5.2

Medicine

GAC Academic English

Method — Key knowledge: an average change and the number of people improving answer different questions

An **abstract** discussion may concern fairness, access or evidence rather than one concrete object. Clarify what the speaker means before agreeing or disagreeing. A group **mean** can rise even if most individual values fall.

A **percentage point** is the difference between percentages. A rate changing from 1% to 2% rises by one percentage point and doubles relative to its original value. Use the denominator and measured outcome. These fictional medical-communication records concern text comprehension, not health improvement or treatment.

Method — Source A: text or task brief

Original written seminar brief: Five volunteers answered a thirty-question comprehension quiz before and after reading a fictional appointment notice. Each scored 10 before reading. Their after scores were 9,9,9,9 and 24. There was no separate comparison group. The quiz measured correct answers about notice wording, not health, treatment, consent or appointment attendance.

The speaker says, “The average score rose by two points, but only one volunteer’s score increased. We should not say most improved or assume the notice caused the change.”

A separate fictional formatting check reports mistaken date labels on 1% of drafts in one collection and 2% in another. The collections differ; these rates are not clinical risks or quiz results.

Method — Source B: response or review record

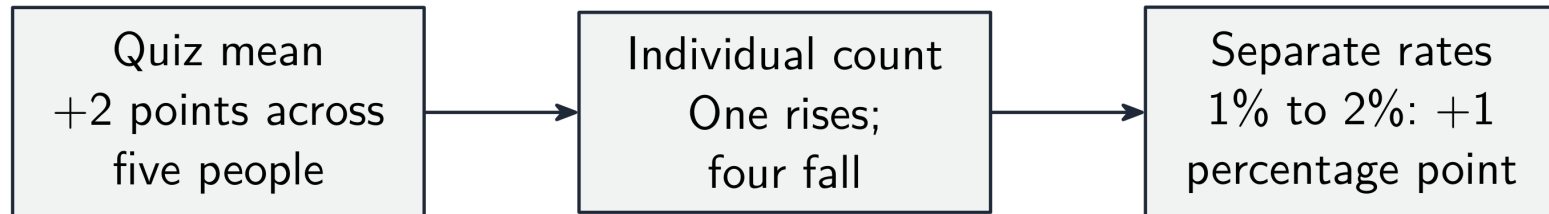
Student A: “If the average rose, most people must have improved. This means the notice improved everyone’s health.” Student B: “A change from 1% to 2% is two percentage points, and proves the formatting change caused more mistakes.” Student C: “Before discussing fairness, can we clarify whether we mean access to the notice or a measured effect on comprehension?”

The group is asked to discuss what the records support, not to issue healthcare policy.

Method — Worked example: check each individual before summarising the group

Known: the individual changes are $-1, -1, -1, -1$ and $+14$ quiz points. Their total is 10 and the mean change is 2. Four scores fell while one increased. Why inspect both summaries? The mean does not give the count of people improving.

For the separate date-label rates, $2\% - 1\% = 1$ percentage point, while the relative increase is 100% of the initial 1% rate. Neither difference identifies a cause when the collections differ. Clarifying the outcome prevents a comprehension result from becoming a health claim.



Exercises 2.1-2.3

2.1 Give the mean quiz score before and after reading. [2]

2.2 State how many individual scores rose and how many fell. [2]

2.3 Correct the claims that most improved, health improved and the notice caused the result. [3]

Exercises 2.1-2.3

2.1 Give the mean quiz score before and after reading. [2]

2.1

Before 10; after 12, from a total 60 across five volunteers.

2.2 State how many individual scores rose and how many fell. [2]

2.2

One rose; four fell.

2.3 Correct the claims that most improved, health improved and the notice caused the result. [3]

2.3

Only one of five scores increased; quiz concerns wording comprehension, not health; no suitable comparison isolates the notice's effect.

Exercises 2.4·3.1

2.4 Give the percentage-point change, the relative percentage increase and one causal limit for the separate date-label records. [3]

3.1 Write a response to Students A and B that clarifies the outcome and the numbers. Add a useful question advancing Student C's discussion. [6]

Exercises 2.4·3.1

2.4 Give the percentage-point change, the relative percentage increase and one causal limit for the separate date-label records. [3]

2.4

One percentage point; 100% relative increase/doubling; different collections do not isolate a formatting cause.

3.1 Write a response to Students A and B that clarifies the outcome and the numbers. Add a useful question advancing Student C's discussion. [6]

3.1

Mean 12 versus 10; one improved/four fell; no health effect or isolated notice cause; one percentage point rather than two; doubling without isolated formatting cause; relevant question clarifies the fairness/access/measurement criterion without inventing evidence.

Exercise 3.2

3.2 Write an 80–110 word academic discussion contribution clarifying what the two records mean and proposing one useful question about access or evidence. [8]

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3.2

Local analytic rubric, $8 \times B1$: correct ten-to-twelve mean; one increase and four decreases; average versus individual distinction; comprehension rather than health and no isolated effect; separate one-percentage-point/doubling distinction; different-collection causal limit; relevant question defining access or evidence rather than issuing healthcare policy; coherent truthful 80–110 word response. Example: “The quiz mean rose from ten to twelve correct answers, but only one volunteer’s score increased; the other four fell. Therefore, a higher mean does not establish that most people improved. The quiz concerns notice comprehension, not health, and the lack of a comparison group prevents isolating the notice’s effect. Separately, the date-label rate changed from 1% to 2%, which is one percentage point or a doubling relative to the original rate. Different collections do not establish its cause. Before judging fairness, should we check who could access the notice and define what outcome a suitable comparison would measure?”