



CRITICAL REASONING – DAY : 02

STRENGTHEN THE CONCLUSION

1. E

Claim: the average hospital check-in time, the time from arrival to medical examination of the patient, for high-priority emergencies has been reduced this year.

Conclusion: this claim is a misrepresentation of data because the health authorities have redefined 'high priority' and excluded accident injuries and respiratory trouble, the most time-consuming cases.

A. Talking about the number of cases. Irrelevant.

B. Financial priorities. Irrelevant.

C. So what if medical experts disagree? Irrelevant.

D. Other cities, gunshot wounds. Out of scope.

E. Correct. Shows that accident injuries and respiratory troubles formed more than 50% of last year's high priority emergencies. So excluding these will definitely reduce the check-in time. This strengthens the conclusion that the claim is a misrepresentation.

2. D

Conclusion: the spreading of the crimson neck feathers (a mating ritual) helps female hoopoes to select healthy mates.

A. Mate preferences for some females. Irrelevant.

B. Talks about a particular case – rejection of diseased males treated through antibiotics. Irrelevant,

C. Some males may not do this. But does the spreading of the feathers help the females anyway? This doesn't say anything about it.

D. Correct. If the symptoms of the infection appear on the neck feathers, the female can identify whether the male is healthy, during the mating ritual. This strengthens the conclusion.

E. Malaria, mutation etc. Irrelevant.

3. D

The average life expectancy of people born in Florida is higher than that of people born in Washington. Therefore, the conclusion is that if a young Washington couple were to begin their family in Florida, their children would have a higher life expectancy.

- A. This weakens the argument by saying that if more children are born in Florida, the life expectancy there will decrease.
- B. Life expectancy in Washington is increasing at a higher rate than that in Florida – but when will they catch up and when will Washington overtake Florida? Don't Know, Can't Say. (DKCS)
- C. Just another statistic. We don't know if the Washington couple's children will fall within this 25%. Also, if only 25% have a life expectancy of over 72 years, what about the others? We DKCS.
- D. Correct. If the environmental factors in Florida that promote longevity are more in number than those in Washington, the likelihood that the children born in Florida will have a higher life expectancy increases. The conclusion is strengthened.
- E. Floridians moving to Washington. Out of scope.

4. B

The conclusion is that the scientists' effort to improve nutrition by encouraging farmers to grow a new variety of carrot called Matias 56 is likely to succeed. This is based on the premise that carrot is a staple in the local diet and the varieties currently grown there contain little beta carotene.

- A. The appearance of food prepared from Matias 56. Irrelevant.
- B. Correct. Means that the environmental conditions in the region are favorable to the growth of Matias 56. So this will flourish. If the environmental conditions were not favorable, then the new variety will not grow and the scientists project will fail.
- C. So Matias 56 is the best. Doesn't tell us anything about the success/failure of the initiative. We already know it is better than the other varieties currently available in these regions.
- D. Other nutrients apart from beta carotene. Out of scope.
- E. Other vegetables. Out of scope. Secondly, we don't know whether these are a major part of their diet.

WEAKEN THE CONCLUSION

1. C

- A. Types of Hodgkin's lymphoma. Irrelevant.
- B. So what? Irrelevant.
- C. Correct. If the source of chemicals is the factory (and then the river and finally, the wells), the Chairperson's claim that the factory is not the cause is weakened.
- D. This just says that the factory does deal with such chemicals. But we don't know anything about how they are disposing it. This does not impact the chairperson's claim.
- E. Perhaps the factory has been directing these pollutants to the wells for decades. Doesn't impact the Chairperson's claim.

2. C

Premise: death rates in regions near incinerator plants and in regions that have no such plants were the same.

Conclusion: Hence, hazardous gases from incinerator plants pose no health hazards to people living near them.

- A. E-waste recycling. Out of scope.
- B. This says that the plants have had no effect on the death rates. Strengthens the argument.
- C. Correct. Talks about other health hazards apart from death. So, the conclusion that incinerator plants pose no health hazards is weakened.
- D. Number of regions which have these plants. Irrelevant.
- E. Employees versus general public. Irrelevant.

3. D

A. So what if publicity is limited to the country in which the accident occurred? We don't know how many news sources the country has.

- B. Motivation behind news sources' coverage. Irrelevant.
- C. Severity and location of the accident and guidelines for the media. Irrelevant.
- D. Correct. This gives an alternative reason why the number of reported accidents increases (not because of an increase in the number of news sources covering these, but because the number of accidents in certain months is more.)Weakens the argument.
- E. Number of passengers. Irrelevant.

4. D

Death rate(R) = number of deaths(n)/ total number of cases(N).

7 years ago, $R_1 = n_1/N_1 = 9\%$; Today, $R_2 = n_2/N_2 = 18\%$

- A. This means that n_2 is higher than what was reported. i.e. R_2 is higher than identified. i.e. $R_2 > 18\%$ This strengthens the conclusion that mad-cow disease has increased in fatality.
- B. n_1 was actually lower than what was reported. i.e. R_1 was lower than identified. $R_1 < 9\%$. This again strengthens the conclusion that the disease has increased in fatality.
- C. Doesn't say anything about the increase in fatality of the disease.
- D. Correct. If this is the case, n_2 is actually lower than what was reported. i.e. R_2 is lower than identified. i.e. $R_2 < 18\%$. This weakens the conclusion.
- E. Irrelevant.

FLAW IN THE ARGUMENT

1. E

The conclusion is that the manager has not discriminated against male employees. This is based on the following fact: he gave stellar ratings to 80% of males under him but only to 65% of the females.

- A. So what? We are focused only on proportions.
- B. Irrelevant.
- C. Male employees who complained versus those who did not. Irrelevant.
- D. Irrelevant.
- E. Correct. If more males deserved to get 4+ rating, but the manager did not give them that, the argument is inherently flawed.

EVALUATE THE CONCLUSION

1. E

Death rate from infection (I) = $1/40$; Death rate from vaccination complication (V) = $1/1000$

We need to evaluate whether it is safer for a cat to receive the vaccine than not receive it.

- A. All causes. Out of scope.
- B. Pets other than cats. Out of scope.
- C. Other infections. Out of scope.
- D. Other infection. Out of scope.
- E. Correct. If no cats actually contract the infection, and we vaccinate all cats, some may die from vaccination complications. So it's better to not vaccinate them at all.

2. C

In 1989, 13% of women b/w 17-18 enrolled. In 2001, 40% were enrolled. The conclusion is that the proportion of women among students has increased. Proportion = percentage of women/total students.

- A. Elementary school. Irrelevant.
- B. Info already derivable from the argument. (100 – 13)
- C. Correct. Helps calculate the denominator of the proportion: $(\% \text{ of women}) / (\% \text{ of men} + \% \text{ of women})$
- D. Age group of 20-25. Irrelevant.
- E. High profile corporate roles. Irrelevant.

3. D

The conclusion is that the monkeys rub the slugs into their fur during the rainy season to protect themselves from mosquitoes. We need to evaluate if this is true.

- A. Slugs' protection against predators. Irrelevant.
- B. Other parts of the world. Irrelevant.
- C. Other animals. Irrelevant.
- D. Correct. If the rubbing behavior has some other reason, and the rubbing in monsoon happens only because the slugs are available only then, the conclusion is broken. So we need this information to understand if the motivation for the rubbing behavior is indeed mosquito repulsion.