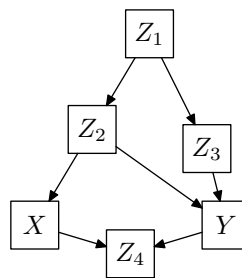


Philosophy 12: Introduction to Causal Reasoning

Confounding study questions

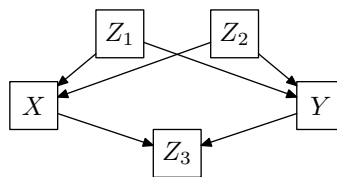
1. A recent study reports that children who are spanked are more likely to become criminals than children who are not spanked. Which of the following might be confounding factors?
 - (a) Education level of the parents.
 - (b) Income level of the parents.
 - (c) Genetic disposition to violence.
 - (d) All of the above.
2. Consider the following graph:



Which of the following variables are confounders of the association between X and Y in this graph:

- (a) Z_1
- (b) Z_2
- (c) Z_3
- (d) Z_4

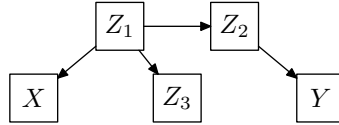
For the next two questions, consider the following graph:



3. Which of the variables are confounders for the association between X and Y ?
 - (a) X
 - (b) Z_1
 - (c) Z_2
 - (d) Z_3
 - (e) Y
4. Which variables should we control for to get the correct association between X and Y ?
 - (a) X
 - (b) Z_1
 - (c) Z_2

- (d) Z_3
- (e) Y

5. Consider the following graph:

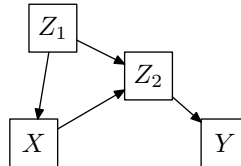


Which of the following variables can we control for to get the correct association between X and Y ?

- (a) X
 - (b) Z_1
 - (c) Z_2
 - (d) Z_3
 - (e) Y
6. To account for a confounder, we need to intervene and set it at a particular value.

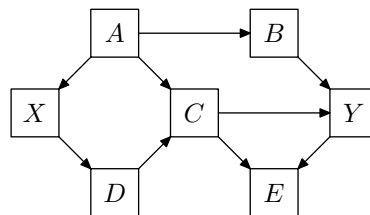
- (a) True
- (b) False

7. Consider the following graph:



Which variables can you control for to get the correct associations between X and Y ?

- (a) X
 - (b) Z_1
 - (c) Z_2
 - (d) Y
8. Consider the following graph:

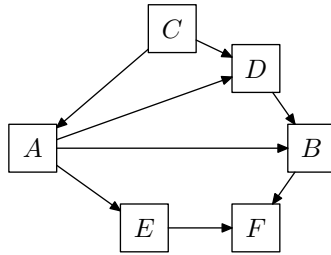


If we want to determine whether X is a cause of Y , which of the following sets of variables can we control for?

- (a) A and C

- (b) B and E
- (c) A and B
- (d) A
- (e) A , B , and D

9. Consider the following graph:



If we want to know the effect on B of an intervention on A , which variables do we need to condition on?

- (a) C
- (b) D
- (c) E
- (d) F