DAGs for Causal Inference

Clemens Jarnach

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Figure 1: Mediation

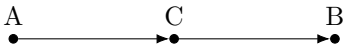

Figure 2: Mutual dependence

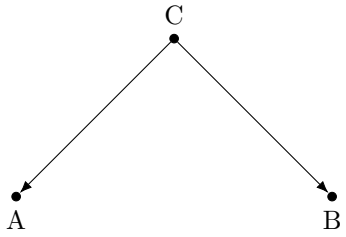

Figure 3: Mutual causation

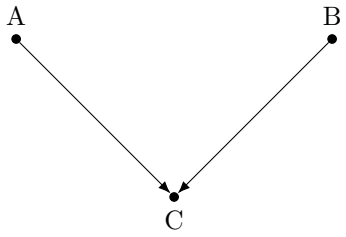

Figure 4: Confounded

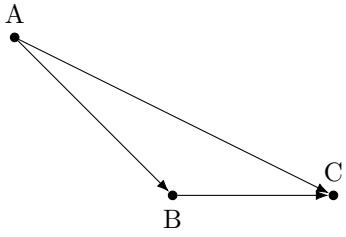

Figure 5: Moderated/Interaction

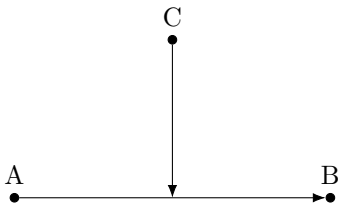

Figure 1: Mediation. This figure shows a directed acyclic graph (DAG) with three nodes A, C, and B, where A and B are not directly connected, but there is a path from A to B through C. This type of graph represents mediation, where the effect of A on B is mediated by C.

Figure 2 : Mutual dependence. This type of graph represents mutual dependence, where A and B both depend on C.

Figure 3 : Mutual causation. This figure shows a DAG with three nodes where A is directly connected to C and B is also directly connected to C. This type of graph represents mutual causation, where A and B both cause changes in C.

Figure 4: Confounded. This is a DAG with three nodes A, B, and C, where A is directly connected to B, B is directly connected to C, and A is also directly connected to C. This type of graph represents confounding, where the effect of A on C is confounded by the effect of A on B and the effect of B on C.

Figure 5: Moderated/Interaction. This figure shows a DAG with three nodes A, B, and C, where A is directly connected to C and B is indirectly connected to C through A. This type of graph represents moderated/interaction effects, where the effect of A on C depends on the value of B.

Bibliography

Morgan, Stephen L, and Christopher Winship. 2007. Counterfactuals and Causal Inference: Methods and Principles for Social Research. Cambridge: Cambridge University Press.